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Hon. A.R.I.B.A., Director General of Archæology in India.



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EXCAVATIONS AT AVANTIPURA.

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Pl. L *for* 657 *read* 651 (now shown with top to left).
Ditto 722 *inverted on plate.*
Ditto 733 ditto.
Ditto *for* 735 *read* 753.
Pl. LVIII*a inverted.*
Pl. LXVIII No. 21*a inverted on plate.*
Ditto No. 22*a inverted on plate.*
Pl. LXIX No. 25 *a* and *b* are reversed.

THE MONUMENTS OF SANCHI. THEIR EXPLORATION AND CONSERVATION.

IN the first part of my reports for the years 1912-13 and 1913-14 I gave a brief resumé of the results of the operations I had been conducting on behalf of Her Highness the Begam of Bhopal amid the Buddhist monuments of Sāñchī, and at the same time I explained that a more comprehensive account of my investigations would be published in the form of a special monograph, which is to be issued both in English and in French and which is to include 128 photographure plates illustrating the whole series of these remarkable and richly decorated structures, together with dissertations on their iconography and epigraphy from the pens of the distinguished French savants, MM. E. Senart and A. Foucher. Every effort will be made to make this projected monograph as exhaustive as possible; but in a publication which covers so much ground it will, needless to say, be impossible to discuss each and every problem in such detail or to illustrate the operations carried out as fully as might be desired; nor will so costly a monograph be so accessible to students as the regular annual reports of my Department. For this reason I propose to devote the following pages to a separate and in some respects supplementary account of my work, illustrating it partly with photographs which would not otherwise be published, and noticing various features of it which cannot be dealt with in the forthcoming monograph. All questions relating to the history and topography of the site, to the iconography and artistic development of the sculptured reliefs or to the records carved upon the monuments, will be reserved for the larger publication. **Introduction.**

For descriptive purposes, the monuments on the hill of Sāñchī may conveniently be divided into four groups. In the first of these are comprised the Great Stūpa and the numerous other monuments near it on the central plateau; in the second, Stūpa 2 and a few unimportant remains situate on the terrace half way down the western slope of the hill; in the third, the early apsidal temple 40 and the mediæval monasteries towards the southern part of the enclave; and in the fourth, the later monasteries and temples on the higher plateau to the east. The numbers by which the various monuments comprised in the first, third and fourth groups are designated in the plan on Plate I are not, it will be observed, arranged in regular sequence. The reason of this is that the numeration of the stūpas adopted by Sir Alexander Cunningham in

the plan which he published in 1854[1] has been generally followed by subsequent writers, and it seemed to me likely to lead to inconvenience and confusion if I abandoned it. Accordingly I have, with one exception, retained General Cunningham's numbers and added others to distinguish those monuments which I myself have discovered, arranging them in such systematic sequence as has been practicable. The exception referred to is the early shrine numbered 8 on my plan. In General Cunningham's sketch a stūpa numbered 8 is shown to the north of Stūpa 3, but on the spot in question there is no vestige of any such structure; nor is any indication of its existence given in either of the plans prepared by General Maisey[2] and Mr. Thompson.[3] On the other hand, General Maisey, who was associated with General Cunningham at Sāñchī in 1851 and who in other respects follows his numeration, places No. 8 south instead of north of the Great Stūpa at a spot where nothing appears on General Cunningham's plan, but where I have now unearthed a stone basement of an early shrine. Accordingly, I conclude that General Cunningham, whose plan in other respects is far from accurate, made the mistake of placing this monument to the north instead of the south of the central group.

At the time when I started my explorations the only monuments on the site which were visible to the eye, were the Great Stūpa and the few other remains indicated in black on my site plan. All the rest, which are delineated on the plan in red, were buried in such deep accumulations of débris and so over-grown with jungle, that the very existence of the majority of them had not even been suspected. My first step, therefore, on starting work in December 1912, was to clear the whole of the enclosed area of the thick growth of trees and brushwood in which it was enveloped; my next was to excavate the eastern and southern sides of the central plateau, where a deep layer of soil lay over the natural rock, and where I anticipated that further remains of value would be found, and where also I hoped to secure fresh evidence regarding the history and original design of the Great Stūpa, which with its massive rail and richly carved *toraṇa* stands unique among the monuments of early Buddhism. In neither respect were my hopes disappointed; but, before I proceed to narrate the details of my discoveries, it behoves me to describe the present appearance of the Great Stūpa and to explain the commonly accepted views regarding its age.

CENTRAL PLATEAU.

Stūpas.

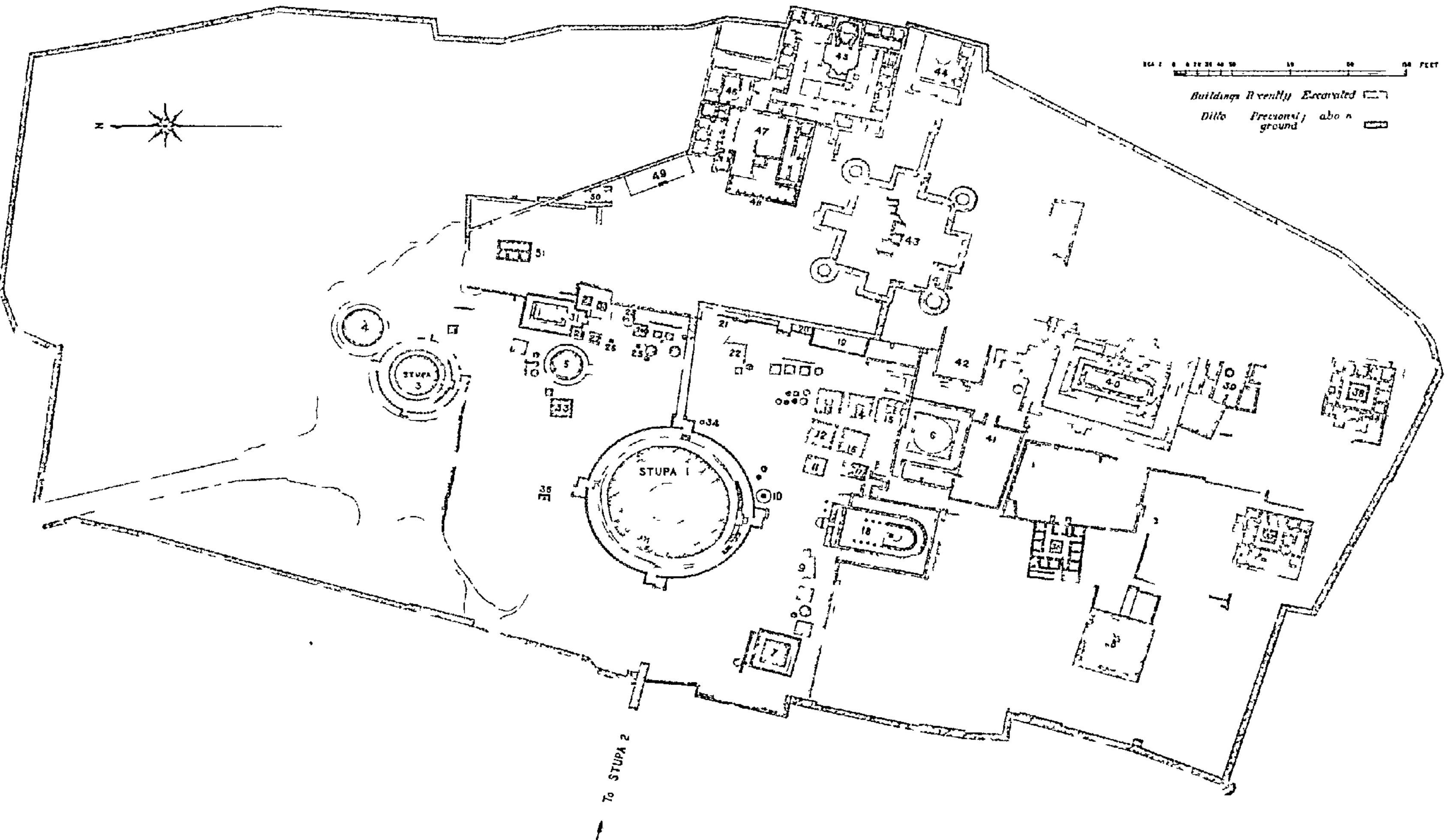
'at Stūpa.

As it now stands, the Great Stūpa (Plates II and V*a*) consists of an almost hemispherical dome truncated near the top and surrounded at its base by a lofty terrace, which served in ancient days as a procession path (*pradakshiṇā patha*) and access to which was provided by a double flight of steps built against it on the southern side. Encircling the monument on the ground level is a second procession path enclosed by a massive balustrade of stone. This balustrade, which is of plain design unrelieved by carvings of any kind, is divided into four quadrants by entrances set approximately at the cardinal points, each one of which was adorned by a gateway (*toraṇa*) lavishly enriched with reliefs

[1] *The Bhilsa Topes*, Pl. IV.

[2] *Sanchi and its remains*, Pl. I.

[3] *Second Report of the Curator of ancient monuments in India* (1882-83), Appendix G, p. C.



PLAN OF REMAINS ON THE SUMMIT OF THE HILL

on both the inner and outer sides. It has commonly been supposed that the Great Stūpa was erected, just as it stands, at the same time as the column near its southern gateway—that is, in the reign of the Emperor Aśoka—and that the balustrade was approximately contemporary with the body of the building; it has also been supposed that the King Śātakarṇi, who is known from an inscription to have been reigning when the southern gateway was erected, was identical with the celebrated monarch of that name who was ruling over the Āndhra dominions in the middle of the 2nd century B.C. These suppositions appeared to me to conflict not only with what is known of the political history of the Āndhras, but with the history also of early Indian plastic art, and accordingly I made it my object at an early stage in the digging to examine the foundations of the Aśoka column, the date of which has long been known, as well as of the balustrade in its vicinity, and to see if any definite clue could be obtained as to their relative ages. With this end in view, I first opened up the ground around the column and found that the bottom of its shaft rested directly on the living rock, and that, as usual, it was roughly circular and hammer-dressed to a height of 8′, above which it was highly polished. I found, too, that up to this point it was imbedded in a packing of heavy stones retained in position by massive walls (Plate III*a*), and that immediately on the top of these walls and packing was laid a floor of *bajri* six inches in thickness, which met the column at the junction of the rough dressed base with the polished shaft above. Thus, there could be no room for doubt that this *bajri* floor was laid immediately after the erection of the column, at the time, that is to say, when the surface level corresponded with the line of demarcation between the rough and polished sections of the shaft. Subsequently, I sank other trenches between the south gateway and Temple **18**, and also in the open spaces to the south-east and north-east of the Great Stūpa, and discovered that the same *bajri* floor extended over the whole of this area, and, furthermore, that it was the earliest floor of which any traces existed on the site; for beneath it there was nothing but a layer of earth and vast numbers of ponderous rubble stones, which had been used by the Maurya builders to fill the depressions and cavities in the irregular surface of the rock, and thus bring it to a uniform level.

As'oka column.

Above the *bajri* floor, on the other hand, there was a succession of later floors separated by layers of débris (Plate III*a*), which afforded clear evidence of the continued occupation of the site during the period following the reign of Aśoka. First came a layer of débris, 4″ to 5″ in thickness, covered with a thin floor of *bajri*[1] in clay; then, about 13″ more of débris and another floor of pounded brick in lime; above this, another layer of débris 14″ to 15″ in thickness, followed by yet another floor of *bajri*[1] overlaid with lime plaster; then more débris consisting of small stones in mud; and last of all, a stone pavement of large slabs which appears to have extended over the whole of the central plateau around the Great Stūpa. Now, any one who is familiar with the excavation of Buddhist sites in India will not require to be told that such an accummulation, four feet in depth with three floors intervening, could hardly have been formed in less than a century; in all probability the process lasted longer, but in any case the laying of the stone pavement cannot be referred to an earlier date than

[1] In the section in Pl. III*a* the *bajri* is, by a slight error, described as red concrete. It is doubtful if any lime was mixed with the *bajri*. In the photograph of a section J the trench in front of the south gateway (Pl. VII*a*) the positions of the several floors have been emphasised by scraping away their edges.

the latter half of the 2nd century B.C. With such clear stratigraphical evidence before me, it was with much interest that I proceeded to follow up the several floors towards the Great Stūpa, and, surmising as I had that the ground balustrade was of considerably later date than that usually assigned to it, I was not surprised to find that all the earlier floors extended beneath the balustrade, and that the level of the latter coincided with that of the uppermost stone floor, with which it must, therefore, have been approximately contemporary. From the balustrade I continued my digging inside the procession path and around the foot of the stūpa, and I was fortunate in making two more discoveries of great interest. The first of these was that the procession path was paved with great slabs extending over its whole width, most of which bore short *ex-voto* inscriptions[1] giving the names of the donors; the second was that the foundations of the terrace which encompassed the body of the stūpa were carried to the same level as the stone paving referred to above, with which they too, like the balustrade, must have been contemporary.

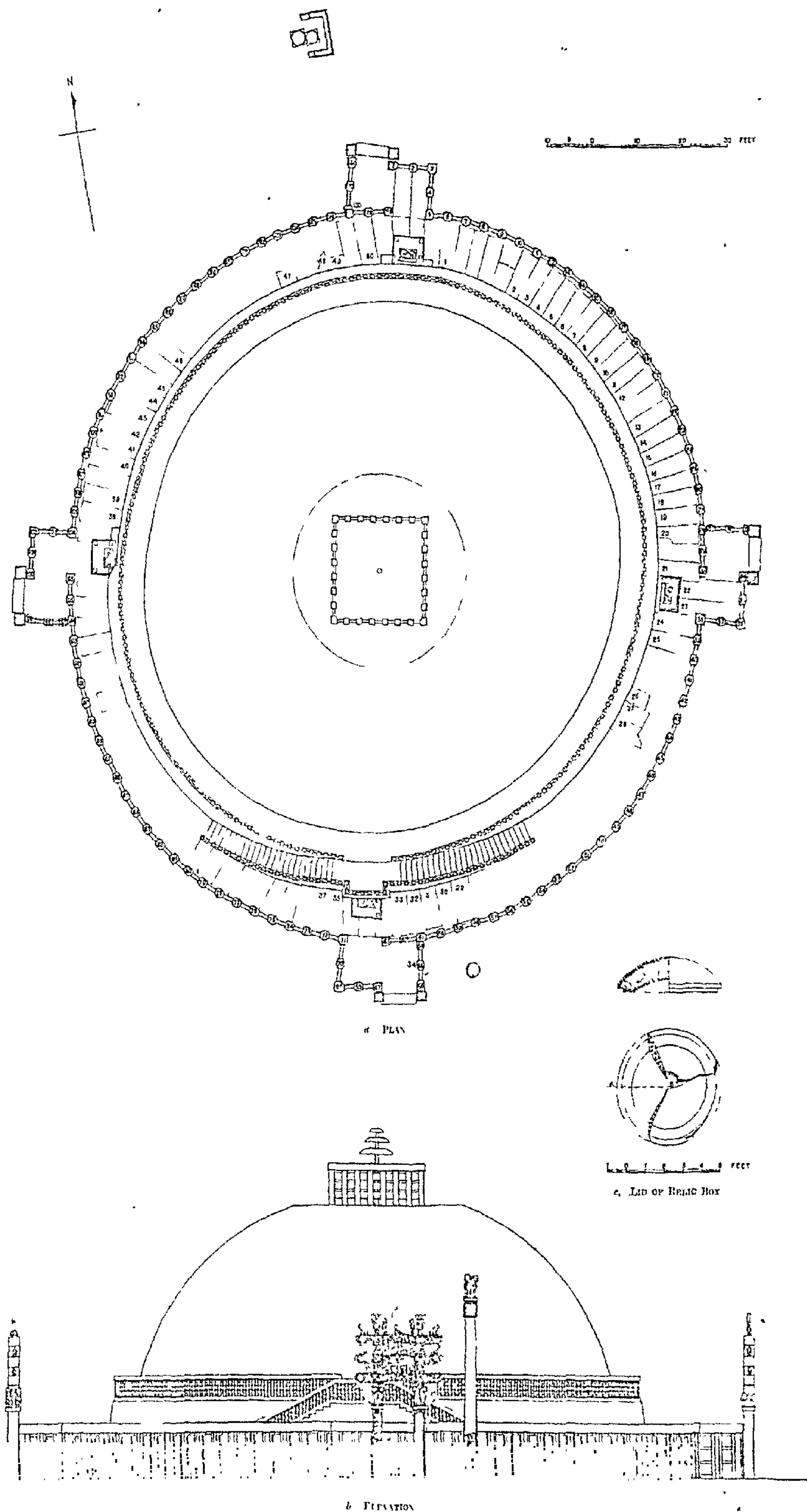
With these essential points determined, the history of the Great Stūpa and the significance of various features in its construction, which had previously been obscure, now became clear. In his description of the opening of the Great Stūpa by Captain Johnson in the year 1822 Dr. Spilsbury states[2] that the core of the structure was composed of bricks laid in mud; and from the sectional drawing, which accompanies Captain J. D. Cunningham's account[3] it appears that the diameter of this brick core was about half the diameter of the whole monument. Furthermore, we learn from General Maisey, who helped Sir Alexander Cunningham to sink a vertical shaft in the centre of the stūpa, that the bricks of which the core was composed measured 16″×10″×3″. All these authorities, as well as every other writer on the subject, have taken it for granted that this brick core was of the same age as the outer envelope of stone, but they have proffered no explanation as to why, the envelope being of stone, the architects should have gone to the trouble of making bricks for the interior of the edifice, when stone would have served equally well and could have been quarried far more cheaply on the spot; nor have they attempted to explain why this stūpa alone should have had a core of brick, while all the other early stūpas on the site are constructed throughout of stone. The truth of the matter, however, is now evident. This core of brick is, beyond doubt, the original stūpa which we have every reason for assuming was erected at the same time as, or a little earlier than, the column of Aśoka, and the envelope of stone was a subsequent addition. This assumption, let me add, is borne out not only by the circumstance that all other known stūpas of the Maurya age are constructed of brick, but also by the dimensions of the bricks themselves (16″×10″×3″), which approximately correspond with those employed in other structures of that epoch. Moreover, it explains the present confined and awkward position of the Aśoka column in the angle of the balustrade by the side of the south gateway (Plate VIIb). The first stūpa being only half the size of the present one, this column originally stood in a clear and open space where it could be seen to its full advantage, with an interval of some fifty feet between it and the base of the edifice; it was not until the body of

[1] The position of these inscriptions, 59 in all, is indicated by the numbers inscribed on the paving slabs in the Plan on Plate II.

[2] *J. A. S. B.*, Vol. IV, p. 712.

[3] *J. A. S. B.*, Vol. XVI, p. 746 and Pl. XXVII.

EXCAVATIONS AT SANCHI: STUPA 1.



a PLAN

b ELEVATION

c. LID OF RELIC BOX

the stūpa was enlarged and the outer railing added, that it came to occupy so cramped a position in close proximity to the latter.

Design of original Stūpa.

What precisely was the design of the original Maurya stūpa, we cannot now determine, but we shall not be far wrong if we assume that, like the Jagat Singh Stūpa[1] at Sārnāth, it was approximately hemispherical in shape with a raised terrace encompassing its base and a *harmikā* and stone umbrella crowning its summit. Several pieces of an umbrella of Maurya date, which probably belonged to this stūpa, were found by me in the débris on the plateau.[2] Like the fragmentary umbrella of the same age which I found at the Jagat Singh Stūpa at Sārnāth, they are relieved by most delicately defined ribs radiating on their under side, the workmanship of which displays the exquisite precision that characterises every known specimen of the mason's craft of this age, and which has probably never been surpassed in the stone carving of any country.

Successive stages of building.

The successive stages by which this brick edifice was subsequently enlarged and embellished are now easy to distinguish. The first step was, as I have indicated, the addition of an envelope of stone, which increased the diameter to over 120′ and the height to about 54′. The new dome was constructed by the simple and natural process of building a thick encircling wall at a given distance from the original structure, and, as it rose course by course, filling in the interval between the two with heavy rubble stones. Precisely the same process was, as we shall presently see, adopted in the case of the apsidal temple **40**, which was enlarged about the same time. The masonry courses of the dome are of uneven width and thickness and were originally laid horizontally, not, as Captain J. D. Cunningham[3] and Fergusson[4] have shown them, sloping down towards the centre of the monument. The lofty plinth around the base of this enlarged dome, which served as a second procession path for the faithful, as well as a buttress to withstand the outward pressure of the dome, has an average height of 15′ 6″, with an average projection of 5′ 9″ at the foot of the dome and a batter of 3′ 0″. Some writers[5] have described the Great Stūpa as a dome resting on a lofty plinth, as if the plinth had been constructed before the dome was raised above it. But this description is misleading; for the dome was first built in its entirety with its sides carried down to the ground level, and the terrace was then added to it, without any bond between the masonry. That the terrace, however, was not an afterthought, as might seem to be implied by the peculiarity of the construction, is clear from the fact that the plinths around the Stūpas **2** and **3** are built in identically the same fashion, and from the fact also, which I ascertained by practical examination, that the concrete facing, from 2″ to 5″ in thickness, with which the upper part of the dome and plinth were finished off, does not extend over the lower part of the dome behind the encompassing plinth. We must conclude, then, that the plinth was designed at the same time as the body of the stūpa, and that it was built on structurally unsound principles for the simple reason that the architects knew no better.

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[1] *A. S. R.*, Pt. II, 1907-08, Pl. XVIII*b*. This sectional drawing also affords a good illustration of the manner in which these monuments were enlarged from time to time.

[2] One of these pieces is illustrated in *A. S. R.*, Pt. I, 1912-13, Pl. VIII*a*.

[3] *J. A. S. B.*, 1847, (XVI), Pl. XXVII.

[4] *History of Indian and Eastern Architecture* (1910), p. 69, fig. 14.

[5] *E.g.*, Fergusson, *op. cit.* p. 70.

Crowning harmikā.

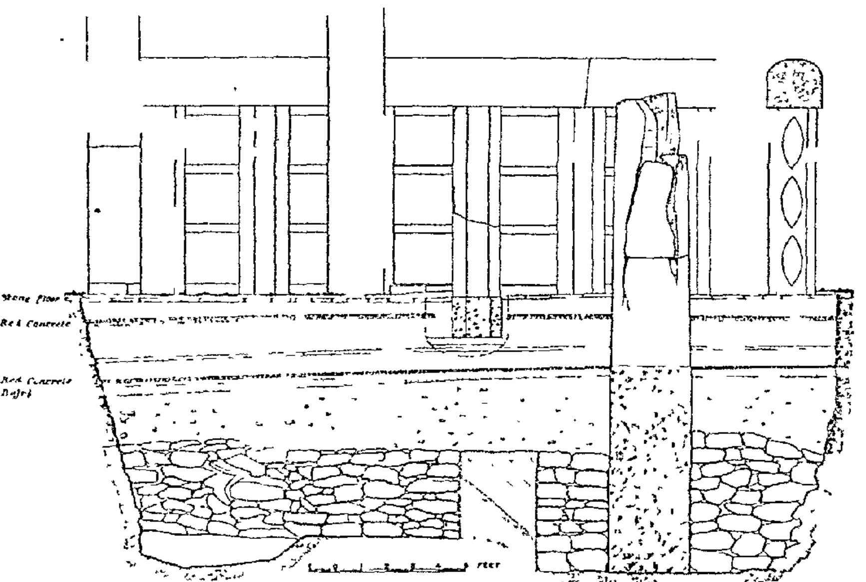
As the crowning pinnacle (*harmikā*) with its umbrellas (*chhatrāvalī*) was an indispensable adjunct of every Buddhist stūpa, we may presume that this feature was added as soon as ever the body of the edifice was complete, and along with it also the balustrade with which it was encompassed. Regarding both these features a notable mistake was made by Cunningham[1] and perpetuated by later investigators, including Maisey[2] and Fergusson. According to Cunningham, the *harmikā* in the centre was a square pedestal adorned with a balustrade engaged in its sides, and surmounted by a heavy corbelled cornice and toothed battlement. In restoring the *harmikā* thus, Cunningham appears to have been led astray by the representations of stūpas of a later date figured on the gateway reliefs, and to have failed to give due consideration to the actual remains on the spot or to the evidence of other sculptures more nearly contemporary with the Great Stūpa. One of the latter is a railing pillar belonging to Stūpa 3, which is illustrated in my Report for 1912-13.[3] If the reader will examine the small but well delineated stūpa carved upon the face of this pillar, he will observe that it was surmounted by nothing more than a square railing standing free and detached, with an umbrella in its centre and a staff to either side from which garlands are suspended. That such square, detached railings were the crowning features of the early stūpas at Sāñchī is now conclusively proved by the remains I have recovered at each of the three principal monuments. In the case of the Great Stūpa, the actual pieces of the *harmikā* railing that I have hitherto brought together from various parts of the site, comprise 17 pillars, 48 cross-bars and 11 coping stones. The dimensions of the various members, which fit accurately together, will be clear from the plan and elevation on Plate III*d*, and I need only notice the following points: first, that there are votive inscriptions incised on the pillars, cross-bars and coping stones; secondly, that the upper parts of the pillars are finely dressed on all four sides—a clear proof (even apart from the existence of the coping stones, which were joined to them by mortice and tenon joints) that they could never have acted as pilasters around the sides of the *harmikā*; thirdly, that the base of the pillars, to a height of about 2′ 6″, was imbedded in the masonry of the stūpa, as is the case also with the crowning rails of the other early stūpas; and, fourthly, that the joints between the coping-stones are not vertical, but sloping—a technical detail manifestly due to the influence of wood construction. From the coping stones recovered (and there are more no doubt still to be found) it is evident that there were not less than three such stones along each side of the square, the centre ones extending over three inter-columniations, the corner ones over two. Restoring the rail in accordance with these indications, we get eight pillars on each side of the square, or twenty-eight in all, the side of the square measuring 21′ 6″ and its diagonal 30′ 1″. Inasmuch, however, as the circular top of the stūpa has a diameter of 38′ 4″, it is manifest that there could not have been more than eight pillars along the side of the square, and it is equally manifest that there could have been no room on the summit for the smaller circular rail shown in Cunningham's and Maisey's restorations. As a fact, there were no grounds at all for restoring this latter rail on the top of the stūpa; for no portions of it were ever found lying there; and it now proves to possess so many members that

Harmikā balustrade.

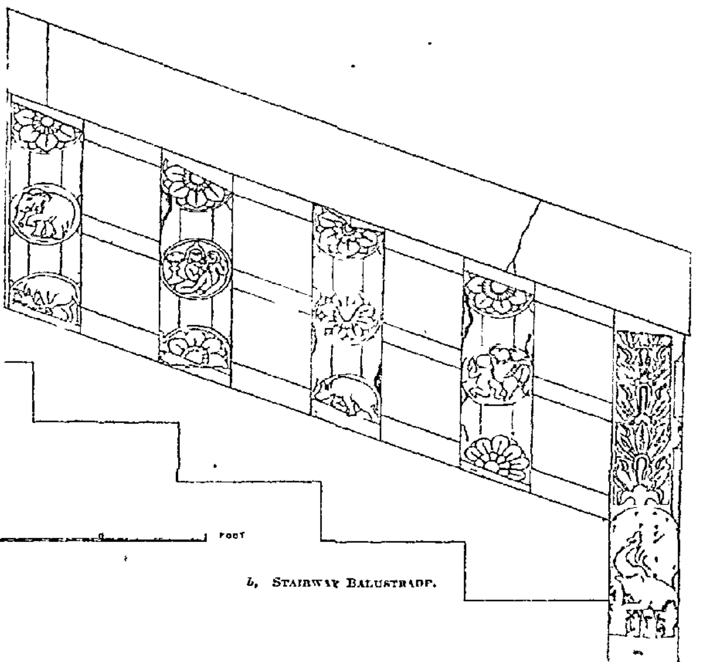
[1] *The Bhilsa Topes*, p. 185 and Pl. VIII.

[2] *Sanchi and its remains*, Pl. II.

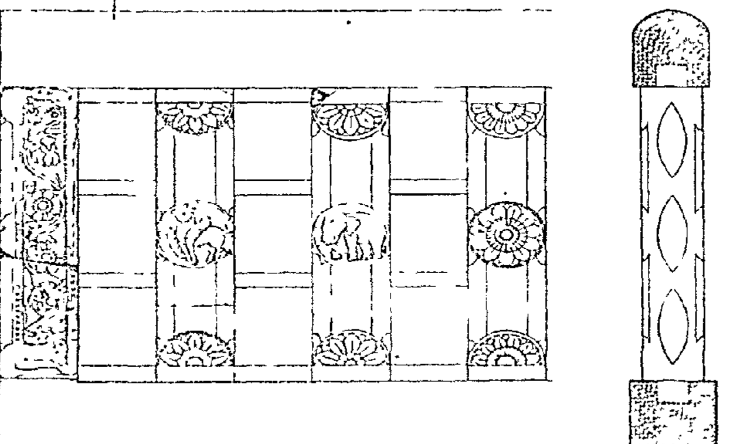
[3] Pt. I, Pl. IX*b*.



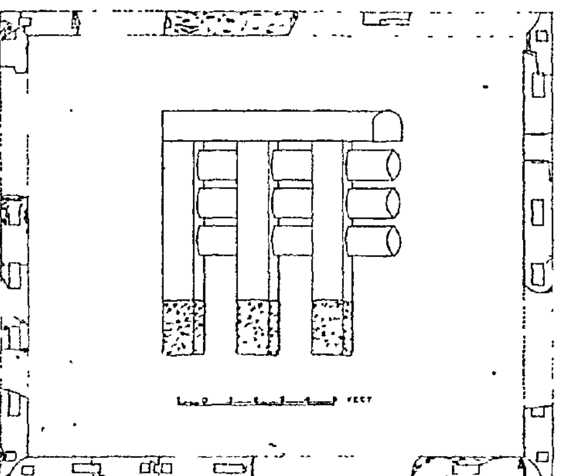
a, Section showing Foundations of Asoka Column and Ground Balustrade.



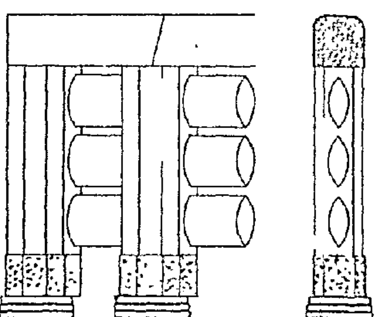
b, Stairway Balustrade.



c, Terrace Balustrade.



d, Harmika Balustrade.



e, Ground Balustrade.

it could not possibly have been fitted into so small a space. The position which it actually occupied was the edge of the terrace below.

As to the umbrella which stood within the square railing, two pieces of it are recorded to have been seen by Cunningham and Maisey, one near the top of the dome, the other at the foot of the breach. Fortunately, both these pieces are still preserved and prove to be parts, not of an umbrella at all, but of the lid of a massive stone relic box which stood, crowned by an umbrella, on the summit of the dome. It was this box, no doubt, which Captain E. Fell saw in 1819 and which he described as then being split in pieces. The lid is delineated in Plate II*c*. It is 5′ 7″ in diameter and 1′ 8″ high, concave on the underside and provided with a rim around its under edge and a mortice hole on the top, into which the umbrella shaft was inserted. Such a ponderous stone lid, fitted securely on a still more ponderous box, was well calculated to support an umbrella above it, even though the umbrella was of stone and of considerable size. It is a reasonable surmise, however, that the actual umbrella which crowned it was the one, of relatively small diameter, which had previously surmounted the earlier brick stūpa of Aśoka and some fragments of which I was fortunate enough to discover near the foot of the stūpa. The relic box itself does not appear to be of Maurya workmanship, and may be presumed to be contemporary with the outer stone envelope. From the above it will be clear that there is no justification for the heavy cornices and battlements depicted in General Cunningham's restoration of the *harmikā*.

Relic box.

Following the crowning pinnacle and balustrade, the third addition to be made to the stūpa was the massive balustrade on the ground level. Fairly accurate drawings of this balustrade are published by Maisey[1] and Cunningham,[2] and the only points that I need pause to note are that the joints of the coping stones, like those of the *harmikā* rail, are sloping and not vertical, as represented by these authors ; and, further, that the base of the pillars, which is rough and imbedded in the ground to an average depth of 1′ 10½″, rests on a foundation of one or more stone slabs (Plates III*e* and VII*c*). Most of the pillars, cross-bars and coping stones of this balustrade bear votive inscriptions indicating that the majority were the gifts of different individuals, and on the strength of these inscriptions Fergusson came to the conclusion that the balustrade must have taken at least a century to complete. This estimate seems to me excessive ; for there must have been large numbers of Buddhists flocking to the great city of Vidiśā and thence making pilgrimages to these sacred edifices, and it may well have been that the whole railing was erected in half the time computed by Fergusson. In any case, however, we cannot be far wrong in asserting that it was not brought to completion before the early decades of the first century B.C.

Ground balustrade.

Pari passu with the erection of this balustrade, the paving of the procession path inside it, to which I have alluded above, also appears to have been laid. Over the greater part of its circuit the width of this path is about 9′ 6″, increasing to 12′ 9″ at the foot of the stairways, and this space was spanned throughout by single slabs of stone, which, like the various members of the balustrade, were the gifts of different donors, whose records are inscribed upon them. In the north-east quadrant this paving is almost intact, but in the other three quadrants it exists in patches only,

[1] *Sanchi and its remains*, Pls. II and III.
[2] *The Bhilsa Topes*, Pls. VIII and IX.

and in the south-west quadrant not a little of it was destroyed when a modern buttress was erected some years ago to support the bulging wall of the terrace.

Stairway and terrace balustrade.

The fourth addition to be made to the stūpa was a balustrade flanking the double stairway and encompassing the terrace. This balustrade (Plates III *b* and *c* and *d*) is relatively small and is distinguished from the ground balustrade by its more refined treatment and by the sculptures which decorate its upright pillars. Up to date I have succeeded in recovering 730 members belonging to it, which comprise the following :—

Of the stairway and landing balustrades.

Kerb-stones	21
Posts or balusters	45
Cross-bars	38
Copings	13

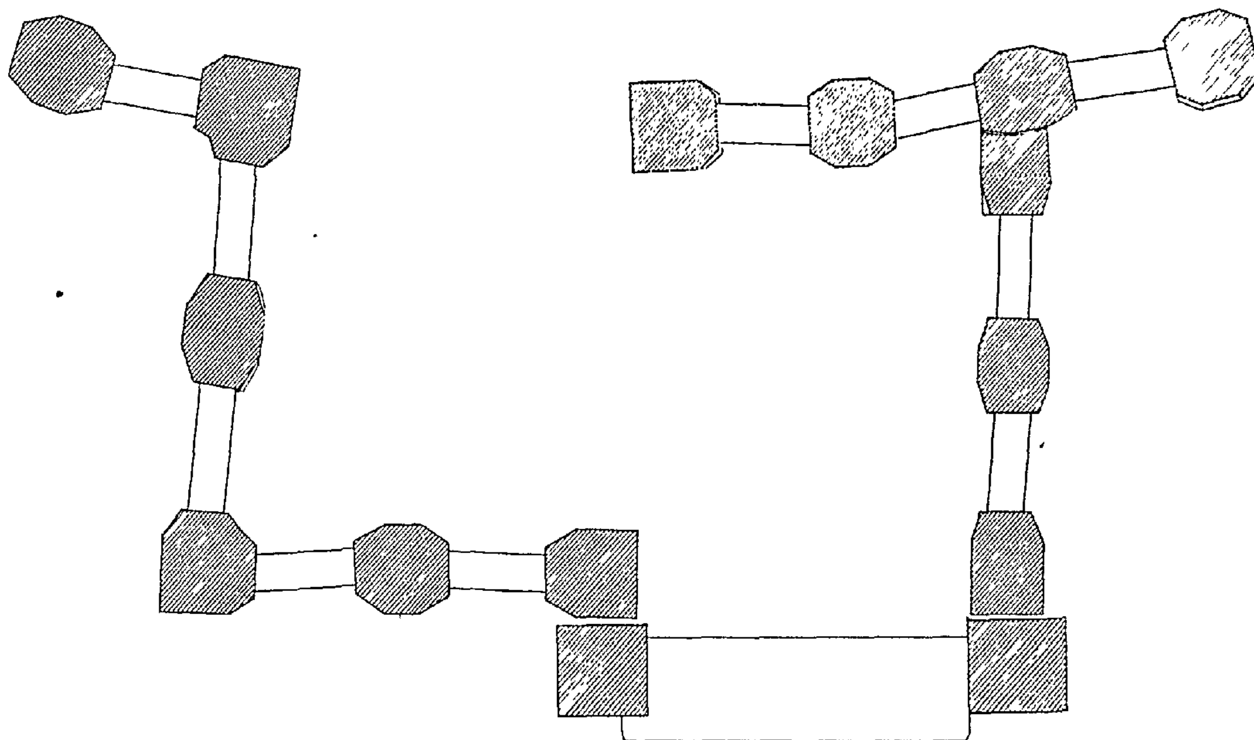
Of the terrace balustrade.

Kerb-stones	37
Posts or balusters	240
Cross-bars	199
Copings	137

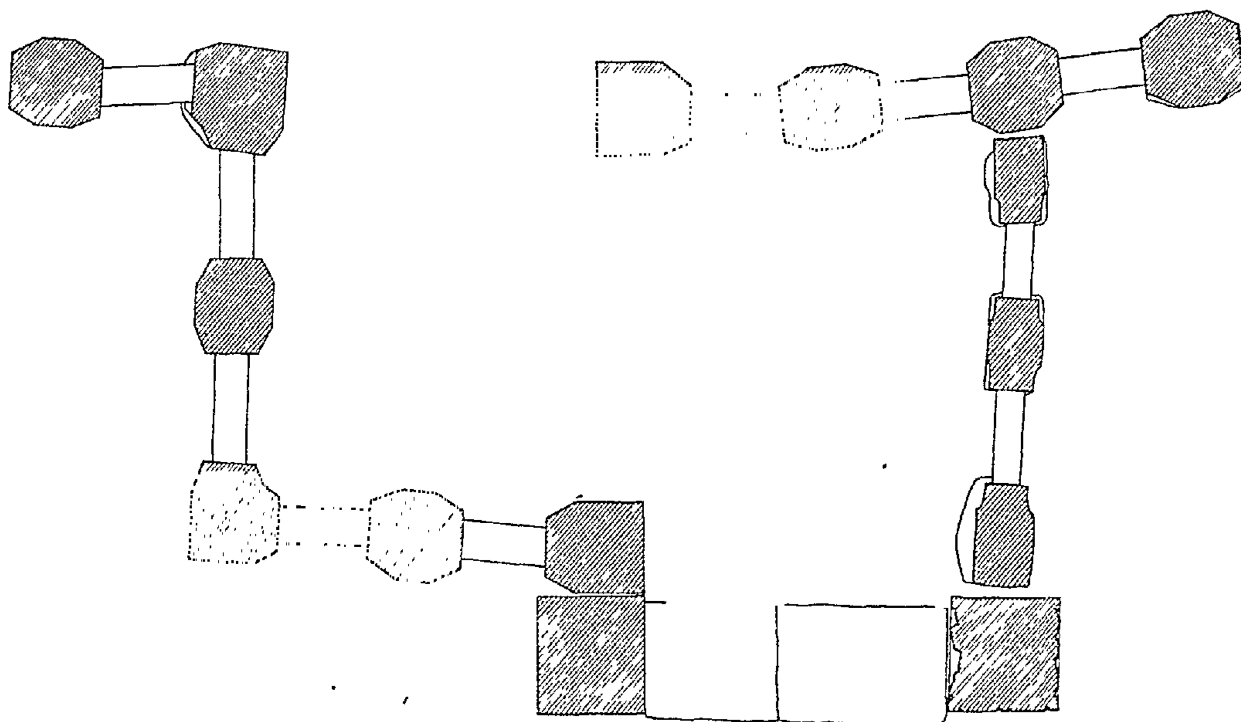
In the case of the *harmikā* and ground balustrades the bases of the upright pillars are imbedded in the masonry of the stūpa or in the ground, but as this method of securing the pillars would have been insecure at the outer edge of the stairs and terrace, the balustrades of the latter are invariably provided with heavy kerb or plinth stones, into which the pillars are fitted by a mortice and tenon joint. Seen from the outside these kerb-stones on the stairways have the appearance of " strings," but are in reality unconnected with the treads, being built independently into the masonry wall at their side in the manner shown in Plates II*b* and III*b*. Each of these kerb-stones is between 9″ and 10″ in thickness and over 6′ in length, being designed to support four of the balusters[1]. The newel posts at the foot of the stairs, which were imbedded in the ground, and mortised also to the end of the lowest kerb-stones, are longer than the other balusters and distinguished by the slightly concave chamfering of their outer edges and the elaborate carvings on three of their faces. The other balusters are adorned on their outer face with one complete and two half discs, sculptured in relief with lotus and other floral or animal designs treated in a variety of ways ; the plainness of their inner face is relieved only at the top and bottom by two half discs, devoid of carving. In the horizontal balustrade of the landing there are, it will be observed, three cross bars between each pair of balusters, whereas in the raking balustrade below there are only two. It is the same with the balustrades of Stūpas 2 and 3, and in each of these cases the transition from two to three cross-bars appears to have been effected in the manner depicted in Plate X*c*, an irregular and somewhat awkward space being left near the base at the juncture of the stairway and landing balustrades. The kerb or plinth stones of the terrace balustrade were not, like those of the stairways, built into the masonry, but were merely laid on its surface, the balustrade depending for its stabil-

[1] Turned upside down these raking kerb-stones, which are stepped on their under-side, have the appearance of toothed battlements and for such they seem to have been mistaken by Cunningham, who restored them round the top of the *harmikā*, in spite of the fact that the donative inscriptions carved upon them were thus inverted.

EXCAVATIONS AT SANCHI: STUPA 1.



a, PLAN OF EXTENSION AT SOUTHERN GATEWAY.

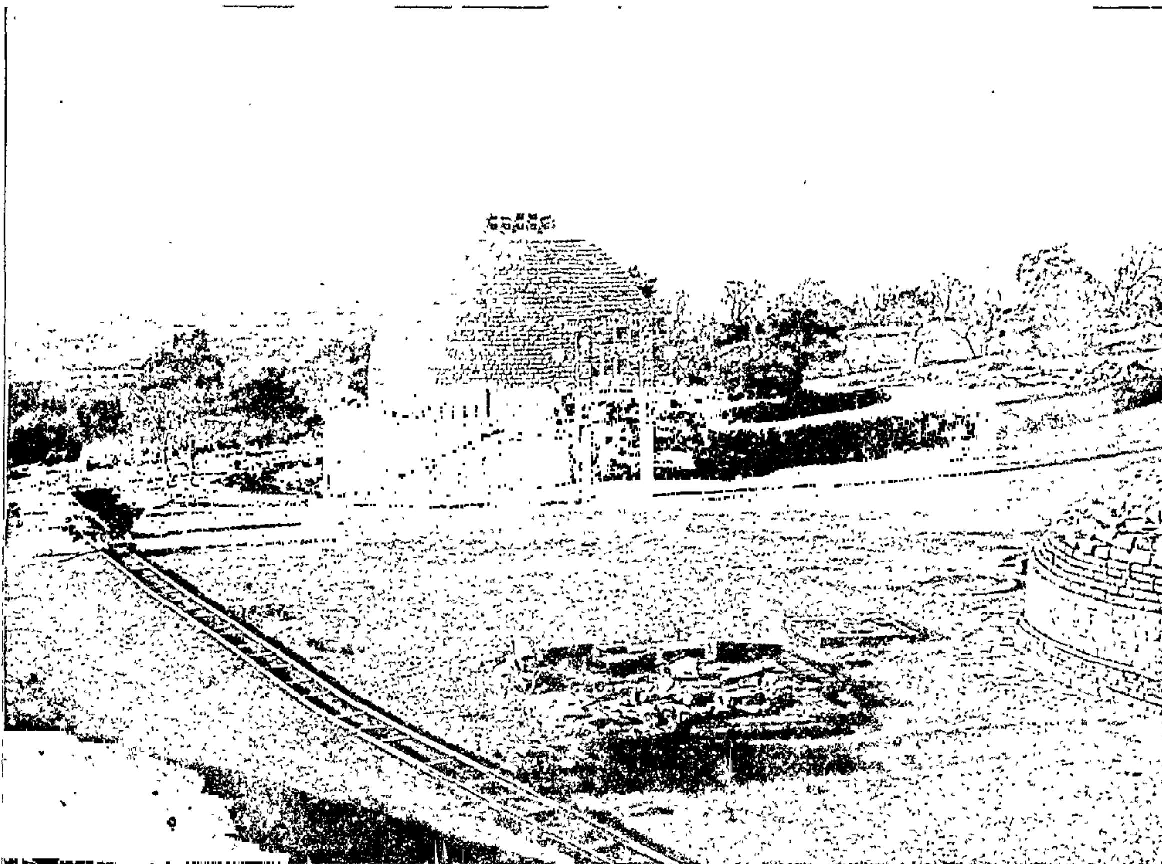


b, PLAN OF EXTENSION AT WESTERN GATEWAY.

EXCAVATIONS AT SANCHI.



a. STUPA 1: GENERAL VIEW FROM NORTH-EAST.



b. STUPA 3: IN COURSE OF REPAIR.

ity upon its circular shape, its weight, and the tenon and mortise joints which connected the members together. All the balusters of this rail except the two newel posts are of the same size and decorated in the same way as the landing balusters; the newel posts have their outer edges chamfered like those of the stairway newels, but unlike them are sculptured on two faces only, namely, on the front and outer face, the back being relieved by two plain half discs.

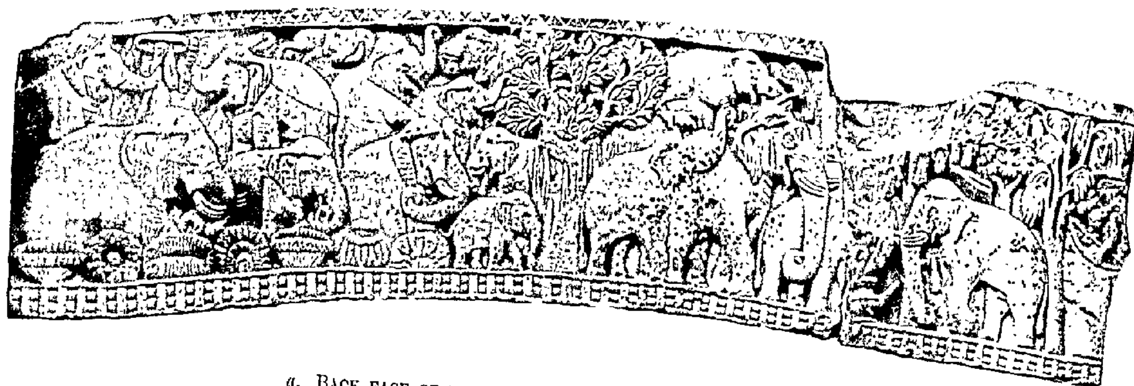
Toranas.

Last of all the additions to be made to this stūpa were the gateways (*toraṇas*) at the four entrances to the ground balustrade. The order of succession in which these gateways were erected, is a problem about which opinions have differed, though it is readily susceptible of solution, if we examine the stylistic and technical treatment of the carvings which adorn them, and the structural character of the extensions of the ground rail which their erection necessitated. Regarding the latter a few words of explanation are needed. At the time when the great balustrade was first constructed, each of its four entrances was screened by extending one side of the balustrade in front of it, like a barbican before a city gate. But when the *toraṇas* came to be erected, they could not with propriety be set side-ways like the existing gate, and accordingly a short balustrade of three pillars was added and another entrance formed at right angles to the former one. Now, an examination of these four extensions (Plate IV) reveals the significant fact that the two at the southern and northern entrances are in all respects similar to the original balustrade, the pillars being of the same height, and cut, dressed and chamfered in the same way to a flat surface, while the two at the eastern and western entrances are not only less carefully adjusted and dressed, but are distinguished by their pillars being shorter and having a shallow concave chamfer. From these indications it may safely be inferred that the southern and northern extensions were more nearly contemporary with the original balustrade than the eastern and western ones, and this inference is borne out by other considerations; for, the stairways being on the south side of the stūpa, it is plain that the south was regarded as the principal entrance, and it was natural, therefore, that it should be the first to be provided with a *toraṇa;* no less natural was it that the northern *toraṇa* should follow next in sequence, in order to balance the southern one, and that the other two should come last. Still clearer, however, is the evidence afforded by the reliefs on the gateways themselves, which show not only that the southern was followed by the northern, but that the eastern came next and the western last.[1] The finest reliefs, it is true, are found on the southern and the poorest on the northern, and this has led some observers to conclude that the northern was the most modern of the four. But the contrast between the sculptures of these two gateways, striking as it is, is evidence of a disparity not so much in their relative ages as in the skill of the artists who executed them. If we seek for a real and reliable criterion of age, we must go deeper and consider above all things the technique of the relief work. Within the compass of the present article I cannot pretend to pursue this subject to the extent of discussing the sculptures on all four gateways and tracing out the features which distinguish them one from another, but I may exemplify the technical and stylistic

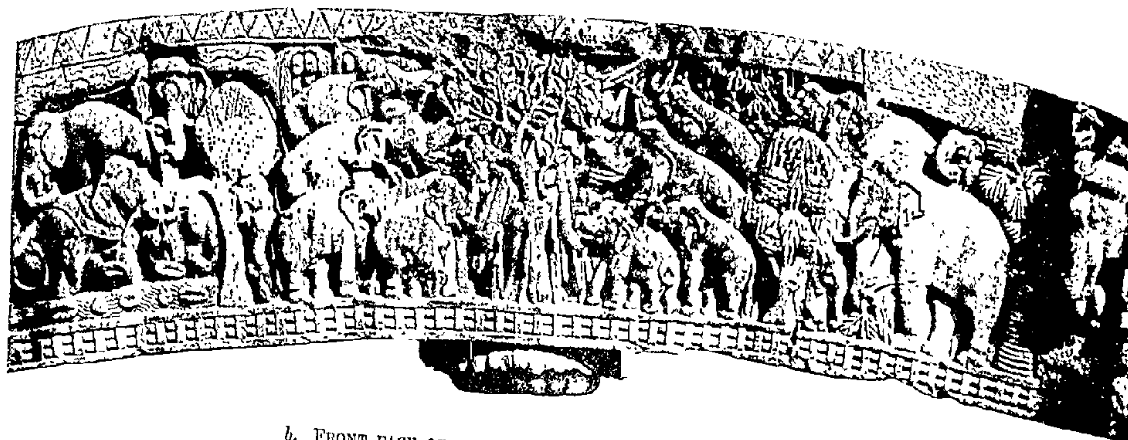
[1] Since writing the above I find that my conclusions are corroborated by an inscription on the northern pillar of the western gateway, which records that it was the gift of the son of Nāgapiya, a banker of Achhāvada, while an inscription on the sooth pillar of the east gate records that it was a gift of Nāgapiya himself.

changes which were taking place by a comparison of two of the reliefs on the southern and western gateways, which being the first and last of the series afford the greatest contrasts. The scene reproduced in Plate VI *a* and *b* is the Chhaddanta Jātaka, as it is depicted on the inner face of the middle architrave of the southern gateway, and beneath it is the same scene as depicted on the front face of the lowest architrave of the western gateway. In the former, the figures are kept strictly in one plane, in order that all may be equally distinct to the observer, and the relief low, that there may be no heavy shadows to obscure the design, with the result that the effect is that of a tapestry rather than of a carving in stone. The elephants, again, are treated in broad flat surfaces with a view to emphasising their contours; the trees sketched in rather than modelled; and the lotus pond indicated by conventional lotuses out of all proportion to the size of the beasts wading through it. In the latter, the leaves and flowers are of normal size; the water is portrayed by undulating lines; the banyan tree is realistically true to nature; the modelling of the elephants is more forceful and elaborate; and, though the figures are kept religiously to one plane, strong contrasts of light and shade and a suggestion of depth are obtained by cutting deep into the surface of the stone. Both reliefs are admirable in their own way, but there can be no two opinions as to which of the two is the more masterly. The one on the south gateway is the work of a creative genius, more expert perhaps with the pencil or brush than the chisel, but possessed of a delicate sense of line and of decorative and rhythmic composition. That on the west, on the other hand, is technically more advanced, and the individual figures, taken by themselves, are undoubtedly more effective and convincing; but it fails to please, because the detail is too crowded and confusing, and the composition too regular and mechanical. The same remarks hold good, if we compare the "war of the relics" on the southern gateway with the somewhat similar scene on the western (Plate VI *c* and *d*). In both there is abundance of fancy and expressive movement, but the movement and fancy are of a different order. In the earlier, the scene is living and real, because the artist has conceived it clearly in his own brain and expressed his conception with dramatic simplicity; in the later, the houses and the figures framed in the balconies are stereotyped and lifeless, and the movement and turmoil of the crowd surging towards the city less convincing, because the artist has depended not so much upon his own originality as upon the conventional treatment of such scenes. In the earlier, the depth of the relief and the intervals between the figures are varied, and the shadows diffused or intensified accordingly; in the later, the figures are compressed closely together, with the result that the shadows between them become darker, and a "colouristic" effect is thus imparted to the whole. In the earlier, lastly, the composition is enhanced by varying the directions in which the figures move; in the later, though the attitudes are manifold, the movement taken as a whole is uniform. These differences in style are due, of course, in part to the individuality of the artists, but they are due, also, to the changes which were coming over Indian relief consequent on the deepening of extraneous influences, on improved technical skill and on the growing tendency towards conventionalism. The extraneous influences to which I refer, are attested by the presence of exotic motifs, which meet the eye at every point and are readily recognised—by the familiar bell capitals of Persia, by floral designs of Assyria, by winged monsters of Western

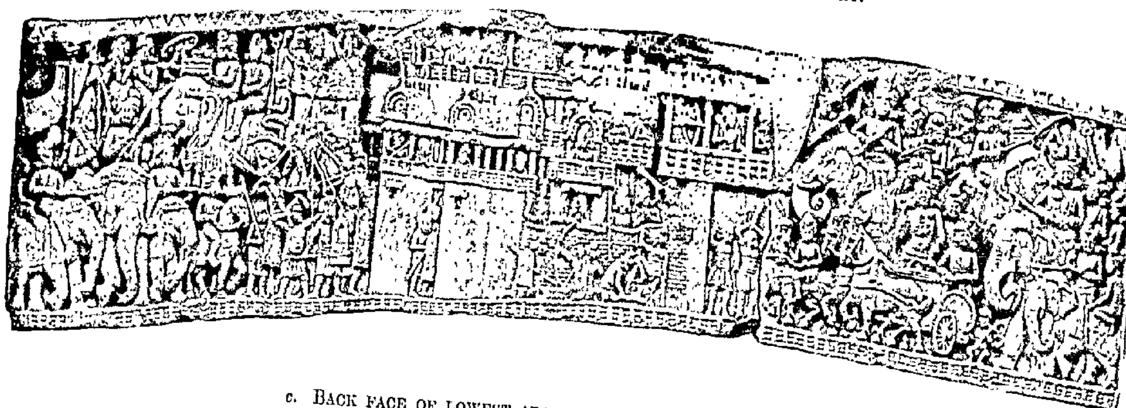
EXCAVATIONS AT SANCHI: STUPA I.



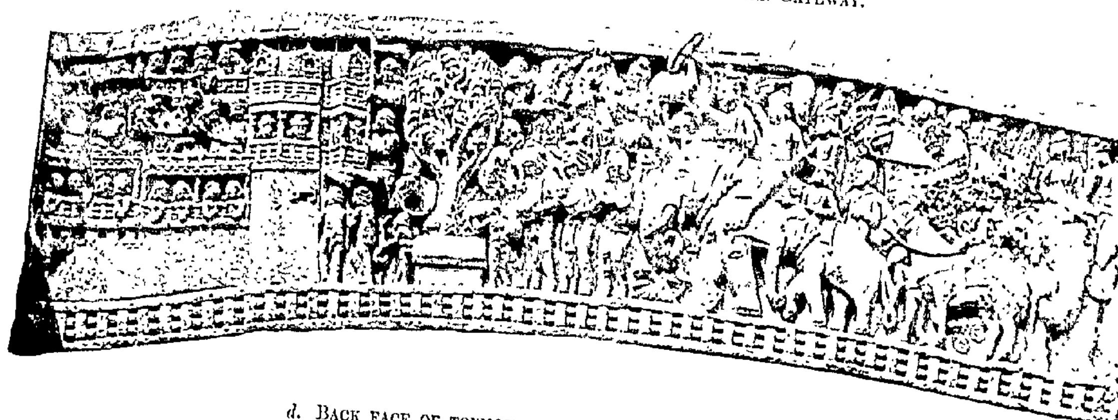
a. BACK FACE OF MIDDLE ARCHITRAVE OF SOUTHERN GATEWAY.



b. FRONT FACE OF LOWEST ARCHITRAVE OF WESTERN GATEWAY.



c. BACK FACE OF LOWEST ARCHITRAVE OF SOUTHERN GATEWAY.



d. BACK FACE OF TOPMOST ARCHITRAVE OF WESTERN GATEWAY.

Photo-Engraved & printed at the Offices of the Survey of India, Calcutta 1916

EXCAVATIONS AT SANCHI.



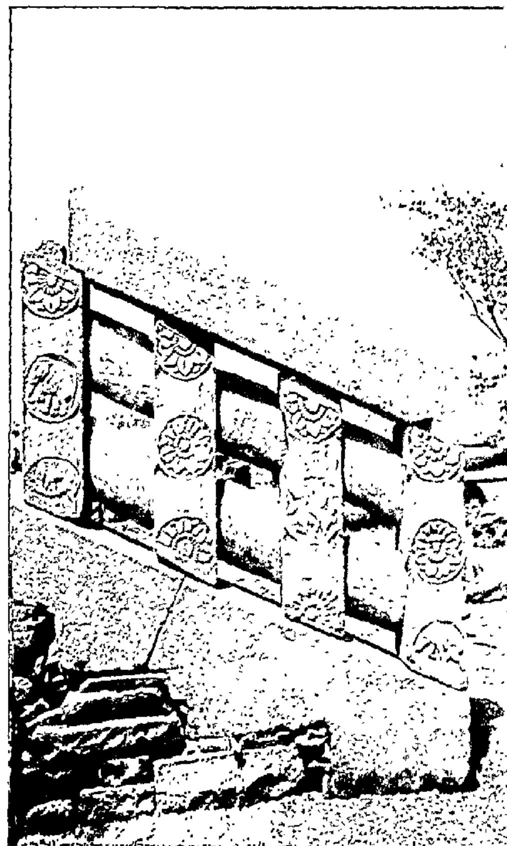
a. STUPA 1: SECTION OF TRENCH IN FRONT OF SOUTHERN GATEWAY.



b. ASOKA COLUMN.



c. STUPA 1: BASE AND FOUNDATIONS OF GROUND BALUSTRADE.



d. STUPA 1: SPECIMEN OF STAIRWAY BALUSTRADE.

Photo-Engraved & printed at the Offices of the Survey of India, Calcutta.

Asia, all of them part and parcel of the cosmopolitan art of the Seleukid and succeeding Empires of the West in which the heterogeneous elements of so many civilisations were fused and blended together. But it is attested still more forcibly by the striking individuality of many of the figures, as, for instance, of the hillmen riders on the eastern gate, by the occasional efforts towards spatial effects, as in the relief of the ivory workers of Vidiśā, by the well-balanced symmetry of some of the groups, and by the "colouristic" treatment with its alternation of light and dark, which was peculiarly characteristic of Græco-Syrian art at this period.

Present condition of stūpa and causes of decay.

Considering the exposed position it occupies on the bare hill top, it is remarkable how well this stūpa has withstood for two thousand years the ravages of time and the elements. Many of the sculptured reliefs, particularly those on the western gateway, seem almost as fresh to-day as when they left the chisel of the sculptor, and such harm as the others have suffered has been chiefly wrought in modern days by Moslem iconoclasts, too many of whom, alas, even now take a delight in defacing their beauty. Other causes which have contributed to the decay of the fabric of the stūpa are the ponding of water round its base and the reckless damage done by the amateur excavators in 1822, when a vast breach was made in the south-western portion of the dome. The former mischief was due, not so much to sinkage in the foundations, which for the most part rest on the living rock, as to the steady deposit of débris which was going on century by century since the early mediæval period, and which accumulated to a height of several feet round about the monument, with the result that each monsoon saw the latter submerged in a sheet of water. Small wonder in these conditions that two of the gateways together with considerable sections of the ground balustrade should have subsided and collapsed. The wonder is that any gateway designed on such fragile principles could have survived at all. In order to provide for the effective drainage of the monument, I have now cleared the whole area around it down to the level of the stone pavement referred to above, and what remained of this pavement—most of it very fragmentary and broken—I have taken up and relaid to falls, sloping it away from the stūpa, and on the eastern side, where there is a considerable rush of water from the upper plateau, constructing an open drain which discharges on to the rocky slope behind the Gupta Temple **17**.

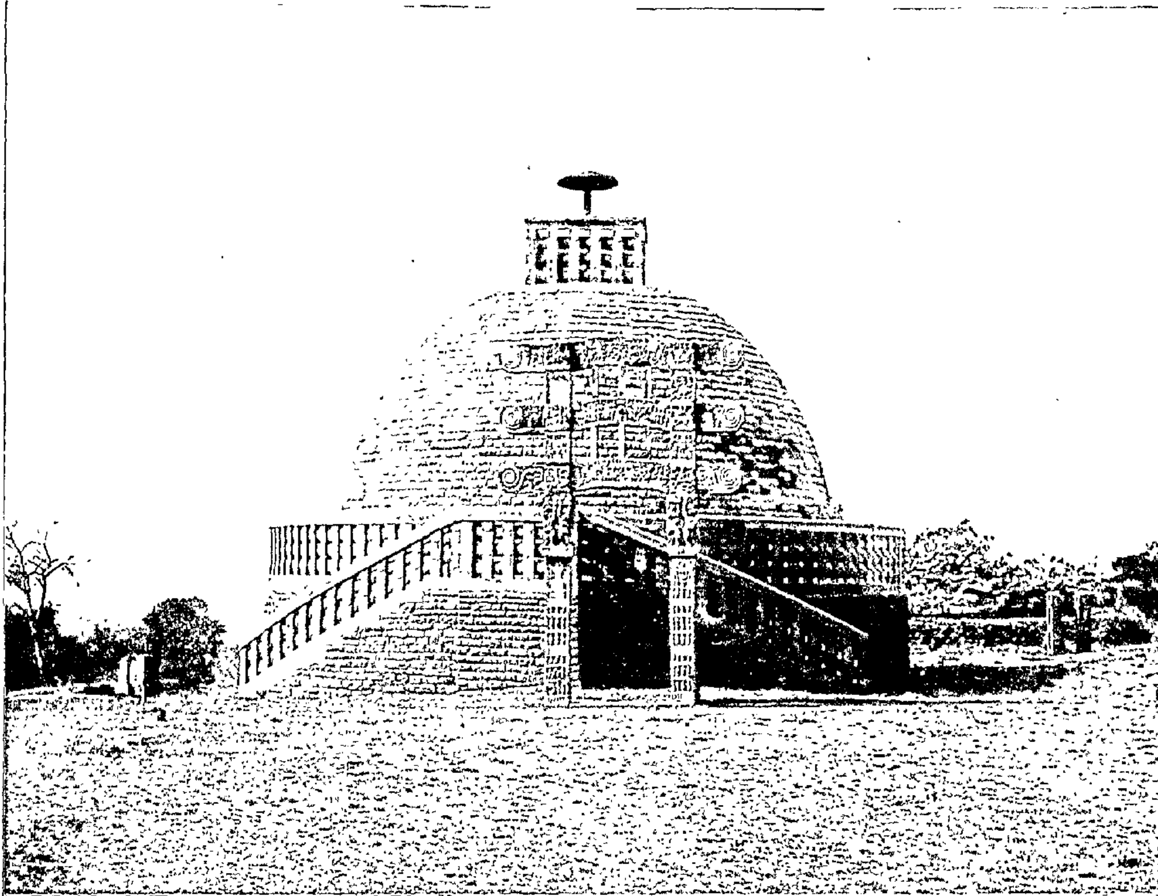
As to the breach in the side of the dome, I have described above how the original stūpa of Maurya date was constructed of solid brick and the later envelope of dry stone masonry, so firm and substantial that, on the side where it has not been interfered with, its contour is still practically perfect. Unfortunately, when the breach was repaired by Mr. Mears in 1881, it was filled merely with random rubble and earth, and apparently not allowed even to settle before being faced with masonry. The disastrous effect of this unworkmanlike proceeding is only too obvious in the settlement that has since taken place in the core of the fabric—a settlement which has caused the upper part of the dome to cave inwards and the lower part, together with the terrace in the south-west quadrant, to bulge outwards, seriously imperilling the safety of the balustrade and gateway below it. In order to remedy this mischief, there is now no other course but to dismantle and rebuild the whole south-western section of the structure, and to prevent the further percolation of rain water into the core by laying the facing stones in lime concrete. The task will be a long and costly one, but, when the

safety of so priceless a monument is at stake, neither trouble nor expense can be allowed to stand in the way. When it has been achieved and the fabric of the stūpa is once more secure, it is my purpose also to restore to the stairway, the terrace and the summit, the balustrades and other features which have fallen from them, so that this unique edifice may, as far as possible, be complete in all its essential features.

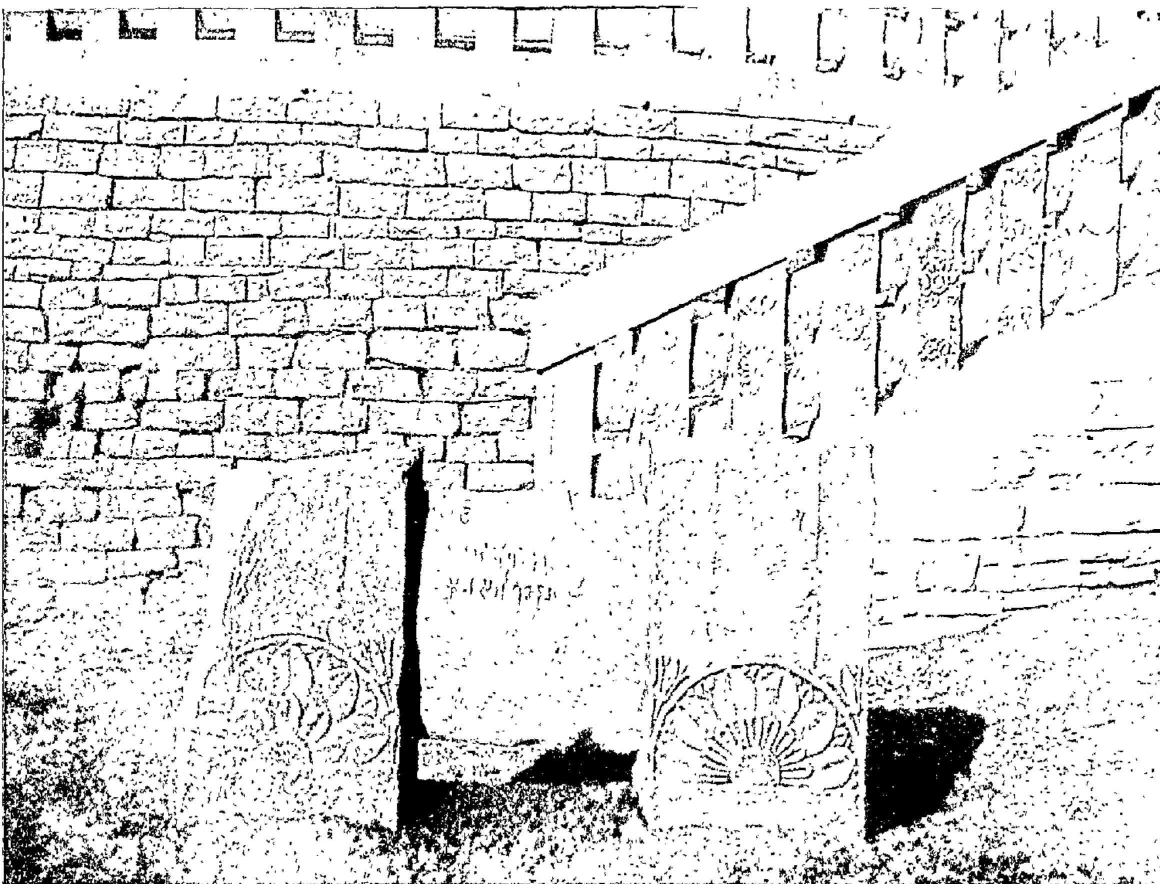
Stone paving. The stone paving to which I have referred as covering the open area around the Great Stūpa was composed of large rectangular slabs, which, so far as can be judged from the existing remnants, appear to have averaged between 6′ and 8′ in length by 3′ to 4′ in width and 3″ in thickness. It was laid not only over the whole of the central plateau up to the limits of its present boundaries, but for a considerable distance beyond the long retaining wall on the east. This wall, as we shall see anon, was constructed for the purpose of holding up the débris which had accumulated here during the mediæval period. But at the time when the pavement was laid, that is to say, about the beginning of the first century B.C., the level around the Great Stūpa extended for at least another thirty yards in this direction, terminating at a point where the hill slope, rising rapidly towards the east, protruded its rocky surface and where a series of monastic buildings afterwards came to be erected. A section of this pavement in a perfect state of preservation was found by me at a depth of 16′ beneath the north-west bastion of building **43**, and a little further on, in the centre of the same building as well as beneath the courtyard of monastery **47**, I came upon the protruding rocky slope and on it the remains of monasteries of the Gupta and earlier epochs which I shall describe later on.

Stūpa 3. Near the north-east corner of the central plateau and a little over 50 yards from the Great Stūpa stands another monument of the same character and design, though of less pretentious size. This is Stūpa **3**, in which General Cunningham found the relics of the two famous disciples of the Buddha, Sāriputra and Mahāmogalāna, and which in old days must have been invested with peculiar sanctity. The narrative of General Cunningham's interesting discovery is to be found in his work *The Bhilsa Topes*, and calls for no repetition here. The relics themselves, together with the steatite caskets in which they reposed and the gems and other articles that accompanied them, seem to have been taken away by the finder and subsequently lost; but one of the two heavy stone boxes in which they were deposited, and which had apparently been thrown aside as of no account, was fortunately rediscovered by me in the débris near Stūpa **5** (Plate X*f*). It bears the legend *Mahā-mogalānasa* in letters as clear as when it was first disinterred. At the time when General Cunningham set about exploring this monument, the upper part of the dome was already in ruins, and its lower courses and the whole plinth buried in the fallen masonry. A portion of this débris appears to have been removed by General Cunningham in order to ascertain the dimensions of the structure, but it is clear from the finds which it was left for me to make, as well as from the inaccuracies of General Cunningham's drawings and description, that his digging could have been but very perfunctory and superficial. This, however, is not to be reckoned a misfortune; for sixty years ago the principles of scientific exploration had not yet been developed, and, in the absence of expert methods of digging and observation, it could not but happen that valuable evidence

EXCAVATIONS AT SANCHI.

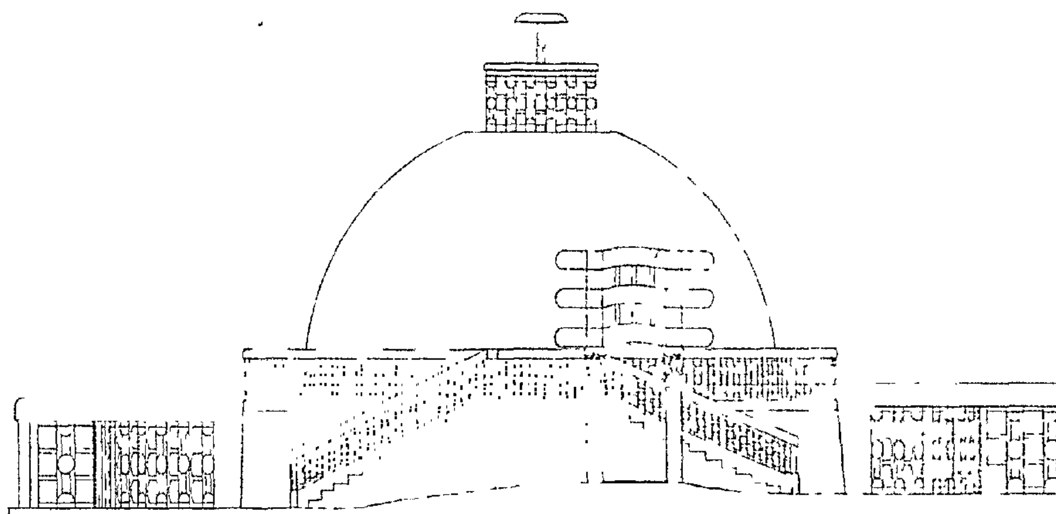


a. STUPA 3: GENERAL VIEW FROM SOUTH.



b. STUPA 3: DETAIL VIEW OF GROUND AND STAIRWAY BALUSTRADES.

EXCAVATIONS AT SANCHI: STUPA 3.



a. ELEVATION

b. PLAN

was frequently unnoticed or destroyed. That this might have happened in the case of these particular remains, is only too apparent from what befell many another monument of ancient India.

From the plan and restored elevation of this stūpa reproduced on Plate IX it will be seen that in almost all essential features it was remarkably like the Great Stūpa. It was faced with precisely the same kind of masonry; was provided with the same high terrace and double stairway; and adorned with a *toraṇa* and with balustrades of the same type. Indeed, apart from its size, the only striking points in which it differed from the Great Stūpa were the possession of one instead of four *toraṇas*, the decoration of its ground balustrade, and the more hemispherical contour of its dome, which was of a slightly later and more developed type. The diameter of this stūpa was 49′ 6″ and its height 27′, as nearly as it can now be computed. The core is homogeneous throughout and composed of heavy unwrought blocks mixed with sparls. As in the case of the Great Stūpa, the body of the structure was first completed and the plinth added afterwards, the latter being composed of somewhat small rubble faced with a single course of cut stone. Standing, as the stūpa does, on the shelving hill side at the edge of the plateau, and its foundations being carried down to the solid rock, the plinth was necessarily higher on the one side than on the other; but a level space around its base was provided for the procession path and ground balustrade by banking up the ground on its western side. At a later date this bank was strengthened with a retaining terrace, which had an altitude of 3′ on the north-west side and was constructed of roughly dressed stones with a core of sparls and broken brick-bats taken apparently from some ruins of the Maurya period. Immediately inside it stood the ground balustrade, of which four pillar bases were found *in situ* in the south-west quadrant and one in the south-east, while some of the broken shafts were also discovered in the débris on the procession path as well as in front of Temple **45**, where they had been used for paving the raised plinth. This balustrade (Plate X*d*) is nearly 8′ high, the coping being 1′ 8″ and the pillars standing about 6′ 3″ above the ground. Like the pillars of the stairway, terrace and *harmikā* balustrades, the latter were adorned with conventionalised but boldly executed lotus designs varied on each pillar according to the fancy of the sculptor, the chamfering at their edges also being slightly concave (Plate XI*a*). They are set at even distances of about 3′ 3″ apart, measured from centre to centre, the pillars being about 1′ 6″ broad and the cross-bars between them 1′ 9″ long. From the position of the later *toraṇa* on the south, coupled with the alignment of the pillars still *in situ*, it is clear that the balustrade must have had an entrance on this side similar to those of Stūpas **1** and **2**; and on the analogy of those stūpas it may also be presumed that there were entrances of a like kind at the other cardinal points. If this presumption is correct, the balustrade comprised 22 pillars in each quadrant including the gateways, or 88 pillars in all. Of the stairway balustrade the two newel posts, broken off near their base, were found in position at the foot of the steps, and other pillars along with plinth stones, cross-bars and copings were unearthed, where they had fallen, immediately below the steps. This balustrade was of the same design and almost of the same dimensions as the stairway balustrade of the Great Stūpa, but itis distinguished from the latter by the better finish and more developed character of the reliefs on the one landing pillar which has survived. The southern face of this pillar, which

stood at the south-east corner of the landing, was illustrated in a previous report[1] and has already been alluded to. The other face of the same pillar is divided into two panels. In the lower of these are two lines of rosettes separated by a line of half-lotuses; in the upper is, in the back-ground, a Persepolitan column surmounted by an elephant *en face* flanked by two lions, from whose jaws depends a garland; and in the fore-ground a chaitya-hall with arched entrance and pinnacled roof behind which are two umbrellas. This landing pillar appears to exhibit, as I have said, a more mature style of relief work than the pillars on the stairway of the Great Stūpa, but this is not the case with the other pillars of the stairway or terrace balustrades, which are indistinguishable in style from those occupying a similar position in the Great Stūpa. It seems probable, therefore, that the rest of the stairway and the terrace balustrade were approximately of the same age as the corresponding features of the Great Stūpa, and that this particular pillar was inserted on the occasion of a later repair.

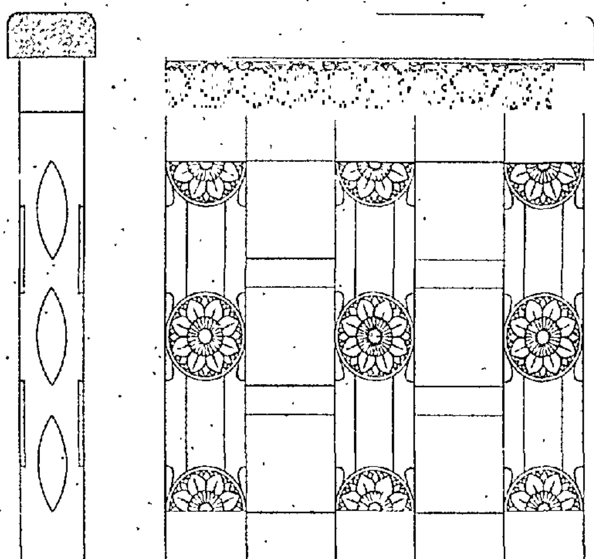
Of the terrace and *harmikā* balustrades (Plate X *a* and *b*) numerous *disjecta membra* were retrieved from the débris round the base of the structure, and have been replaced in their appropriate positions. To judge by the style of decoration on its pillars and coping, the latter balustrade must have been contemporary with the other balustrades of this stūpa, and we may therefore infer that this stūpa was designed and completed in its entirety and with all its balustrades about the time when the terrace and stairway rails were added to the Great Stūpa, probably in the early half of the first century B.C., the only subsequent additions being the landing rails referred to above and the *toraṇa* at the south gateway. The stone umbrella which crowned this stūpa had fallen down on the north-eastern side, and was found lying near Stūpa 4. It measures 4′ 4″ in diameter and is hollowed out on the underside in the manner shown in the section on Plate X*e*, and provided with a square socket hole for the reception of the stone shaft. In his description of this monument on p. 295 of *The Bhilsa Topes* Cunningham speaks of the dome being "crowned by a pedestal 4½′ square"; but seeing that the upper part of the dome had perished before he started his explorations, it is obvious that he could not have seen the pedestal in question.

The richly carved *toraṇa* in front of the south gateway appears from the style of its reliefs to have been the latest of all the five *toraṇas* on the site, and its erection may safely be assigned to the first century A.D. By the time it was set up much soil had collected in and around the procession path and the ground level had risen between one and two feet, thus concealing the original procession path and hiding from view the lowest steps of the ascending stairways. In order to expose the latter, it was necessary to remove this ancient accumulation of soil; but to avoid endangering in any way the foundations of the *toraṇa*, the digging was stopped short at the foot of the steps and a slope constructed from the upper to the lower level at a distance of nine yards from the actual jambs of the *toraṇa*.

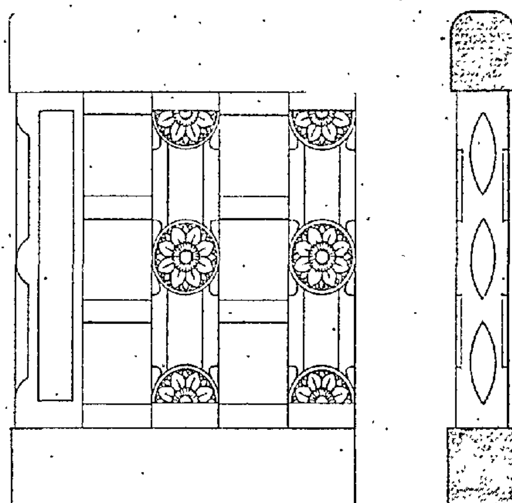
It remains to add that in the course of excavating the procession path on the north side of this stūpa I found a stone pillar belonging to a solid fence of the same type as that found by Mr. Bhandarkar at Besnagar and figured in Plates LVI *a* and LVII of this report. The pillar measures 3′ 10½″ in height, with a tenon projecting another 4½″ at its top; its width is 11¾″ and its thickness 9½″, the sides being provided with deep grooves for the panels to fit in and the bottom with a groove and tenon.

[1] *A. S. R.*, Pt. I, 1912-13, Pl. IX*b*.

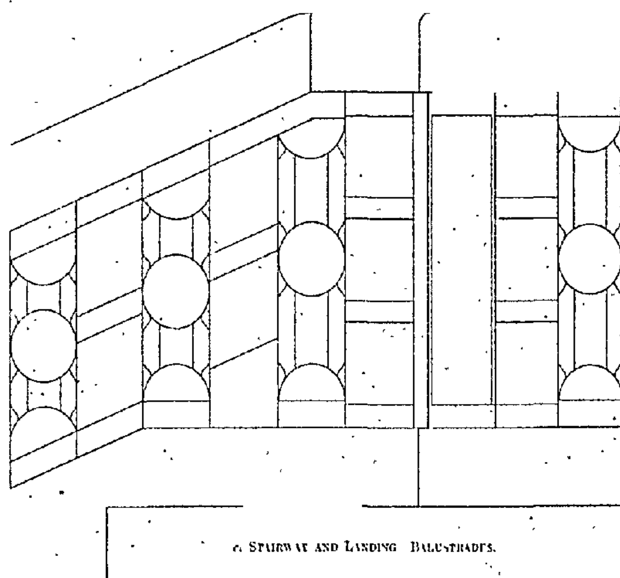
EXCAVATIONS AT SANCHI: STUPA 3.



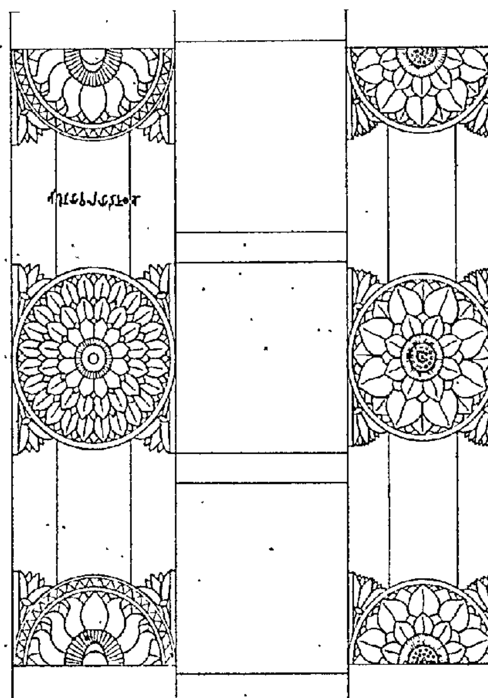
a. HARMIKA BALUSTRADE



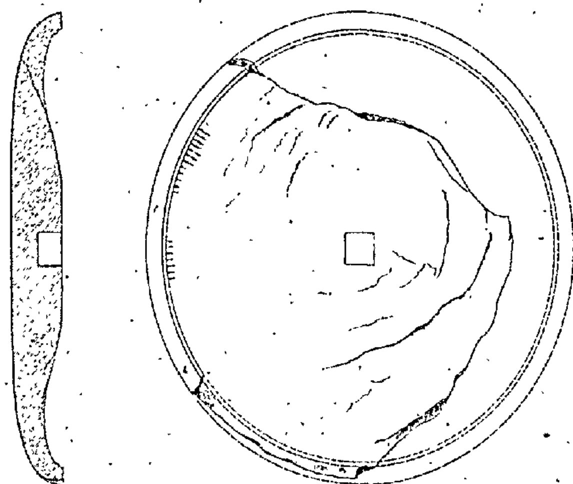
b. TERRACE BALUSTRADE.



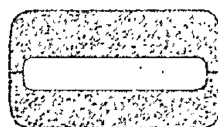
c. STAIRWAY AND LANDING BALUSTRADES.

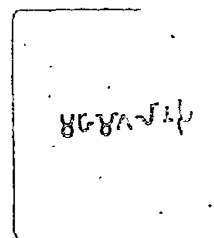


d. GROUND BALUSTRADE



e. CHHATRA.





f. RELIC BOX.

FEET

To judge by the chamfering of the corners at the top of the pillar and by the quality of the stone dressing, this pillar appears to date from the second or first century B.C., but where the fence to which it belonged originally stood, is unknown.

Immediately behind and to the north-east of Stūpa **3** is another stūpa of slightly smaller dimensions, which is now reduced almost completely to ruins. What remains of it is constructed in precisely the same manner as Stūpa **3**, and there can be little doubt that it was approximately contemporary with the latter. Remnants of the slabs with which the lower procession path was flagged still survive, but no trace was found of any ground, stairway or terrace balustrade, and it seems most unlikely, therefore, that any of these balustrades was ever constructed. On the other hand, a most admirably carved coping stone forming part of a *harmikā* balustrade was found not far to the south of this stūpa, and may well have belonged to it. This coping stone is 5′ 7″ in length but broken at one end, and adorned on the outer face with an undulating garland of lotus blooms and leaves with birds seated among them. Stūpa 4.

The only other stūpa on this plateau which dates from the early epoch is No. **6**, situated to the east of Temple **18**. The core of this stūpa like that of Stūpas **3** and **4** is composed of heavy blocks of stone interspersed with chippings, and is manifestly of the same age as the latter, but the existing face masonry is much more modern, having apparently been added in the 7th or 8th century A.D., by which time it may be presumed that the original facing had collapsed. The later masonry is laid in small, even and well dressed courses, varying from 2½″ to 6″ in thickness, with narrower courses inserted at intervals, additional stability being secured by the provision of footings (which are never found in the earlier structures) at the base both of the superstructure and of the plinth. Like the plinths of most of the mediæval stūpas on this site, the latter is square in plan and of no great height. Its measurement along each side is 39′ 6″, its elevation about 7′. As evidence of the early date of the core of this structure, it is noteworthy that the lower section of the walls on the west and north sides of the court in which this stūpa stands, are also of an early age, being constructed of massive stones and descending many feet below the floor level of the small Gupta Shrine **17** hard by. In mediæval times the upper parts of these walls starting from the higher level were repaired in smaller and neater masonry. Stūpa 6.

The rest of the stūpas on the plateau belong to mediæval times. Most conspicuous among them is No. **5** (Plate XII*a*), which was erected probably in the 6th century A.D. Like all the stūpas of the mediæval period its core is composed mainly of small rubble and earth, and its face masonry is laid in neat narrow courses with footings at the base similar to those of Stūpa **6**. In this case, however, the plinth is circular instead of square, having a diameter of 39′. Projecting from its south side is a statue plinth of Udayagiri stone, the design and construction of which indicate that it was set up about the 7th century A.D. This possibly was the base to which originally belonged a seated Buddha statue that was wrongly set up some years ago in the procession path of the Great Stūpa opposite the south gateway. Stūpas 5, 7 etc.

To about the same period as Stūpa **5** are to be referred also Stūpa **7** at the south-west corner of the plateau, and the group of Stūpas **12, 13, 14, 15** and **16**, which are ranged in two lines near Temple **17** (Plate XII*b*). The plinths of all these stūpas are square and constructed of rubble and earth faced with neatly dressed masonry and

strengthened by footings round the outside. Some of them have a small square relic chamber in the centre; the others are solid throughout. No. 7, which was opened by General Cunningham but proved to contain no relics, is standing to a height of about 5′. On all four sides of it are the remains of what appears to have been a later terrace which increased the dimensions of the base to a square of 29′. That this terrace is more modern than the body of the stūpa is proved both by its rougher construction and the fact that its foundations rest on a layer of débris which had accumulated round about the original structure. Projecting out, again, from this terrace on the northern side, and probably contemporary with it, are the remains of what may be assumed to have been a *chaṅkrama* or promenade, over the western end of which two small circular stūpas of the ordinary type have been built. Of Stūpa **12** the relic chamber had been almost completely destroyed, but amid the fallen masonry of its walls I discovered a pedestal of a statue of the Kushān period executed in Mathurā sandstone. The pedestal, which measures 8¼″ in width, is unfortunately broken and nearly half of the relief which adorned its face as well as of the three lines of inscription engraved upon it are gone.[1] What is left of the carving consists of a seated figure of the Buddha flanked on his proper left by two female devotees bearing garlands in their right hands, and what is left of the inscription reads :—

Stūpa 12.

L. 1 . . . . *[Bodhi] satvasya Maitreyasya pratimā pratishṭa [pitā].*
L. 2 . . . . *sya kuṭubiniye Vishakulasye dhitu Vashi*
L. 3 . . . . *tana [ṁ] hi [ta] sukh [ā] rtha [ṁ] bhavatu.*

From this it appears that the statue was one of the Bodhisattva Maitreya.

Stūpa 14.

In Stūpa **14**, again, I brought to light another statue not lying in the débris, as in the case of the last mentioned stūpa, but set up against the western wall of the relic chamber, with a second wall immediately in front of its face to protect it from damage. This statue represents Buddha seated cross-legged in the *dhyāna-mudrā*, the familiar attitude of meditation. Like the pedestal described above, it, too, is of Mathurā sandstone and a product of the Mathurā School, but the features of the face, particularly the lips and eyes, the highly conventionalised treatment of the hair and the no less highly stylised disposition of the drapery, proclaim it to be of the early Gupta, not of the Kushān, period. As this statue had already suffered much from wear and tear before it was enshrined in this stūpa, it affords additional evidence of the relatively late date of the building, which on other grounds I assign to about the seventh century A. D. No doubt the statue was taken from one of the many shrines of the early Gupta age, which were then falling to decay, and entombed here as an object of special veneration. The burial of older cult statues, whole or fragmentary, in Buddhist stūpas is a practice which appears to have been common during the mediæval ages; for I have found instances of it not only at Sāñchī, but at Sārnāth, Saheṭh-Maheṭh and other sites.

Time was when the Great Stūpa was surrounded, like all the more famous shrines of Buddhism, by a multitude of stūpas of varying sizes crowded together on the face of the plateau. The majority of these appear to have been swept away during the operations of 1881-83, when the ground around the Great Stūpa was cleared for a distance of some 60′ around the outer rail, and, apart from those described above, the only ones that have survived are a few clustered together near Stūpa 7 and a few more

[1] For a photograph of this pedestal see *A. S. R.*, 1912-13, Pt. I; Pl. VIIIb.

in front of Temple **31**, where a deep accumulation of débris served to protect them from harm. In this latter group two especially are deserving of mention, namely, those numbered **28** and **29** on my plan and situated to the right and left of the steps by which Temple **31** is approached. Each of these small stūpas is provided with the high square base, cornice and footings characteristic of the early Gupta age to which they belong, and each has the same outward appearance. Their interior construction, however, is not identical. The one to the west of the steps is built throughout of stone ; but the one to the east (Plate XI*b*) has a core of large sized bricks some of which measured as much as $19'' \times 7\frac{1}{2}'' \times 4''$, which had no doubt been taken from some much more ancient structure. In the centre of this core and at a height of 3′ from the ground level I found a tiny relic chamber and in it a casket consisting of a small cup of coarse earthenware with a second cup of similar fabric inverted over it as a lid. Inside this rough and ready receptacle was a small bone relic and the remains of a broken vase of fine terracotta with polished surface, such as was manufactured during the Maurya and Śuṅga ages. The presence of this early and fragmentary vase inside a casket which was itself quite intact, coupled with the antiquity of the bricks forming the core of the edifice leaves little room for doubt that the relic had originally been enshrined in another and older stūpa, and that in the early Gupta period, when this stūpa had presumably fallen to decay, it was transferred to the small structure in which I found it, together with the fragments of the casket in which it had previously reposed and some of the bricks belonging to the older edifice. From the size and fabric of these bricks and from the fact, too, that during the Śuṅga and later ages stone only was employed for building purposes at Sāñchī, it may be concluded that the older stūpa was erected during the Maurya epoch, but where it was situated there is now no means of ascertaining.

Stūpas 28 and 29.

Pillars.

Besides the stūpas there are two other classes of monuments on the central plateau, namely : pillars and temples. The number of the former must once have been considerable ; for fragments of many shafts and capitals have been found lying in the débris. Most of them, however, are small and insignificant memorials of the Gupta age, those which are deserving of notice being but five in number. The earliest of these, the pillar of the Emperor Aśoka near the south gateway, has already been referred to and its foundations described in connexion with the date of the ground balustrade of the Great Stūpa[1]. Drawings of it, approximately correct,[2] are published in Maisey's[3] and Cunningham's works,[4] and a photograph of the crowning lions was reproduced in the first part of this report.[5] Though not in all respects quite so vigorous and striking as those on the Aśoka pillar at Sārnāth, these lions exhibit so close an affinity with the latter, that there can be no reasonable doubt that they are the handiwork of one and the same sculptor. The design of the two capitals, however, is not identical. In the Sārnāth example the four lions are surmounted by a wheel (*chakra*), but this feature is absent in the Sāñchī capital, and in place of the four animals—the horse, the bull,

Aśoka pillar.

[1] *Cf.* p. 3, *supra* and Pl. IIIa.
[2] The actual diameter of the shaft is 3′ at the original ground level and 2′ $3\frac{1}{4}''$ at the top.
[3] *Sanchi and its remains*, Pl. XIX, fig. 2 and Pl. XXXIII, fig. 4.
[4] *The Bhilsa Topes*, Pl. X.
[5] 1912-13, Pl. VIIIc.

the elephant and the lion—alternating with wheels on the abacus of the Sārnāth capital, the Sāñchī specimen is adorned with four honey-suckle designs separated one from the other by pairs of geese facing each other, symbolical perhaps of the flock of the Buddha's disciples. In point of plasticity and technique, on the other hand, the two capitals are strikingly similar. Both are characterised by the same spirited vitality combined with a certain tectonic conventionality, which brings them into harmony with the architectural character of the monument; in both there is the same tense development of the muscles, the same swelling veins, the same strong set of the claws, the same crisp treatment of the mane disposed in short schematic curls, and the same bold modelling of the brow and eye, the pupil of which was originally inlaid with some precious stone or coloured paste, that must have added strikingly to the realism of the group. In my monograph on the monuments of Sāñchī I shall treat of the genesis and development of early Indian art and I shall there show how these particular monuments of Aśoka have little real part in its history, being the products of the exotic Perso-Hellenistic School and alien to Indian ideas alike in expression and technique. Here I need only invite the reader to compare them with the relatively rough and rudimentary lion capitals of the south gateway, which were no doubt imitated from the Aśoka capital, or with the bas-reliefs on the ground balustrade of Stūpa 2 (Plate XVIII), which strikingly demonstrate the primitive character of the true indigenous sculpture.

Pillar 25. The next pillar in chronological order is that numbered **25**[1] in my plan, which was erected about the same time as the Khām Bābā pillar at Besnagar, that is, in the second century B.C., not, as Maisey and others have supposed, during the age of the Guptas. At a height of about six feet from the ground on the south side are a few letters of a mediæval inscription, and near the base on the south-west side are some defaced characters apparently of the shell type; but both of these records were inscribed on the pillar long after its erection and afford therefore no clue as to its date. That it belongs, however, to about the period of the Śuṅga dominion, is clear alike from its design and from the character of the surface dressing. The height of the pillar including the capital is 15′ 1″,[2] its diameter at the base 1′ 4″. Up to a height of 4′ 6″ the shaft is octagonal; above that sixteen-sided. In the octagonal portion all the facets are flat, but in the upper section the alternate facets are fluted, the eight other sides being produced by a concave chamfering of the arrises of the octagon. This and a very effective method of finishing off the arris at the point of transition between the two sections are features characteristic of the second and first centuries B.C., but are not, so far as I am aware, found in later work. The west side of the shaft is split off, but the tenon at the top, to which the capital was mortised, is still preserved. The capital is of the usual bell-shaped Persepolitan type with lotus leaves falling over the shoulder of the bell. Above this is a circular cable necking, then a second circular necking relieved with a bead and lozenge pattern and finally, a deep square abacus adorned with a railing in relief. The crowning feature, probably a lion, has disappeared.

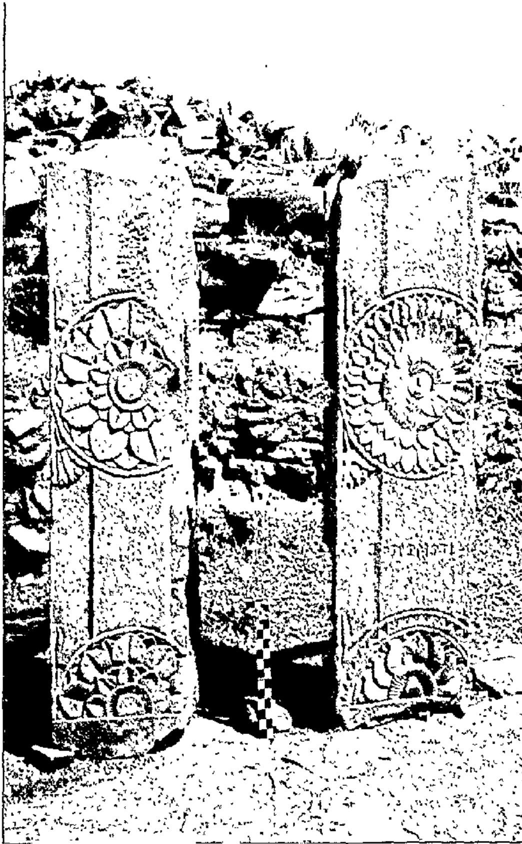
Pillar 26. The third pillar, numbered **26**,[3] stands a little to the north of the one just described

[1] Distinguished by the letter Q in Maisey's plan.

[2] Measured from the old ground level.

[3] P in Maisey's plan.

EXCAVATIONS AT SANCHI.



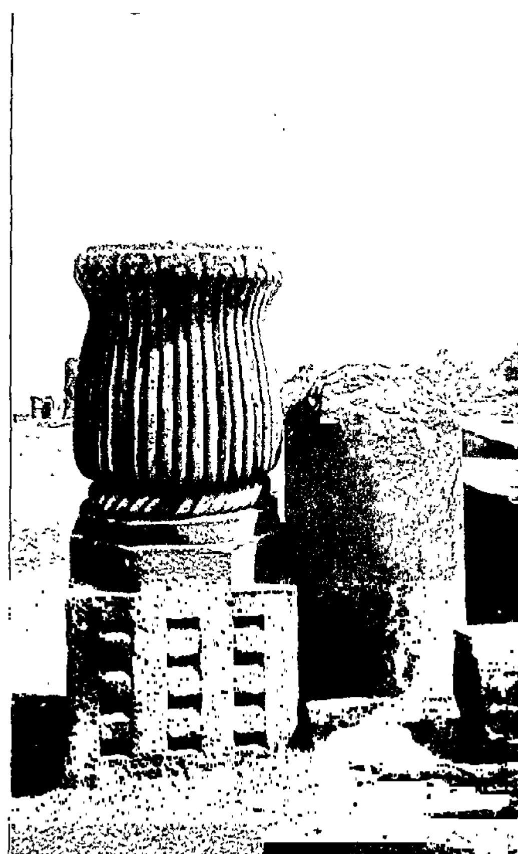
a, STUPA 3: PILLARS OF GROUND BALUSTRADE.



b, STUPA 29.



c, BASE OF GUPTA COLUMN 35.



d, GUPTA COLUMN 35: STUMP AND CAPITAL.

and belongs to the early Gupta age. Apart from its design, it is distinguished from the other pillars on the site by the unusual quality and colour of its stone, which is harder than that ordinarily quarried in the Udayagiri hill, and of a pale buff hue splashed and streaked with amethyst. At Sāñchī this particular variety of stone was used only in monuments of the Gupta period. This pillar was composed of two pieces only, one comprising the circular shaft and square base, the other the bell capital, necking, lions and crowning *chakra*. Unfortunately, the shaft is now broken into three sections, which owing to the splitting of the stone cannot be fitted together again. The height of the whole pillar was approximately 22′ 6″, and that of the lowest section of the shaft which is still *in situ* is 5′ 8″ measured from the top of the square base. On the north-west side of this section is a short mutilated inscription[1] in Gupta characters recording probably the name of the donor. As was usual with pillars of the Gupta age, the square base projected above the ground level, the projection in this case being 1′ 2″, and was enclosed by a small platform, 4′ 2½″ square. The lion capital of this pillar is, it need hardly be said, a feeble and clumsy imitation of the one which surmounted the pillar of Aśoka, with the addition of a wheel at the summit and with certain other variations of detail. The variations referred to are observable in the cable necking above the bell capital, which is composed of a series of strands bound together with a riband, and in the reliefs on the circular abacus, which consist of birds and lotuses of unequal sizes disposed in irregular fashion, not with the symmetrical precision of earlier Indian art. Like the grotesque lions on the southern gateway these lions also are provided with five claws on each foot, and in other respects their modelling exhibits little regard for truth and little artistic feeling.

It was in the Gupta age also that the massive pillar near the north gateway, numbered **35**[2] in the plan, was erected. This pillar has repeatedly been described as the counterpart of and contemporary with the pillar of Aśoka near the southern gateway; but a very perfunctory examination is sufficient to show that its ascription to the Maurya epoch is wrong. Every feature, indeed, whether structural, stylistic or technical, is typical of Gupta workmanship. Most of the shaft has been destroyed, but the stump still remains *in situ*, and the foundations are intact (Plate XI *c* and *d*). The form, too, of the platform around its base is sufficiently clear, and the capital and statue, which it is said to have supported, are both relatively well preserved. What remains of the shaft is 9′ in length, 3′ 10″ of which, measured from the top, are circular and smooth, and the remainder, constituting the base, square and rough-dressed. Its diameter at the dividing line between the square and circular sections is 2′ 7″ and immediately beneath the capital 2′ 2½″. In the Gupta age, it was the common practice, as I have already remarked, to keep the bases of such monolithic columns square, whereas those of the Maurya age were, so far as I am aware, invariably circular. Again, every known column of Maurya date is distinguished by its exquisitely accurate dressing and highly polished surface; but in this case the dressing of the stone is characterised by no such finish. As to the foundations, which consist of heavy stone boulders retained by stout walls, we have not yet accumulated sufficient data from other sites to use them as wholly reliable criteria of age, but it is noteworthy that they are constructed on a more uniform and regular plan than the foundations of the Aśoka

Pillar 35.

[1] *Cf. Corpus Inscr. Indicarum* III, pp. 279-80.

[2] Distinguished by the letter M in Maisey's plan.

column near the south gate. On the other hand, the stone platform which enclosed the base of Pillar **35** is both designed and constructed in the characteristic manner of the Gupta period, and the iron chisels which I discovered wedged beneath the bottom of the shaft and which were used to maintain it in the perpendicular, have yielded on analysis almost identically the same results as other implements of that epoch. This analysis, for which I am indebted to the kindness of Sir Robert Hadfield, F.R.S., is as follows :—

C	Si	S	P	Mn
·05	·09	·009	·303	·09.

With this it is interesting to compare the analysis of the Iron pillar of Chandra at the Qutb, near Delhi, namely :—

C	Si	S	P	Mn	Fe
·08	·046	·006	·114	*Nil*	99·72

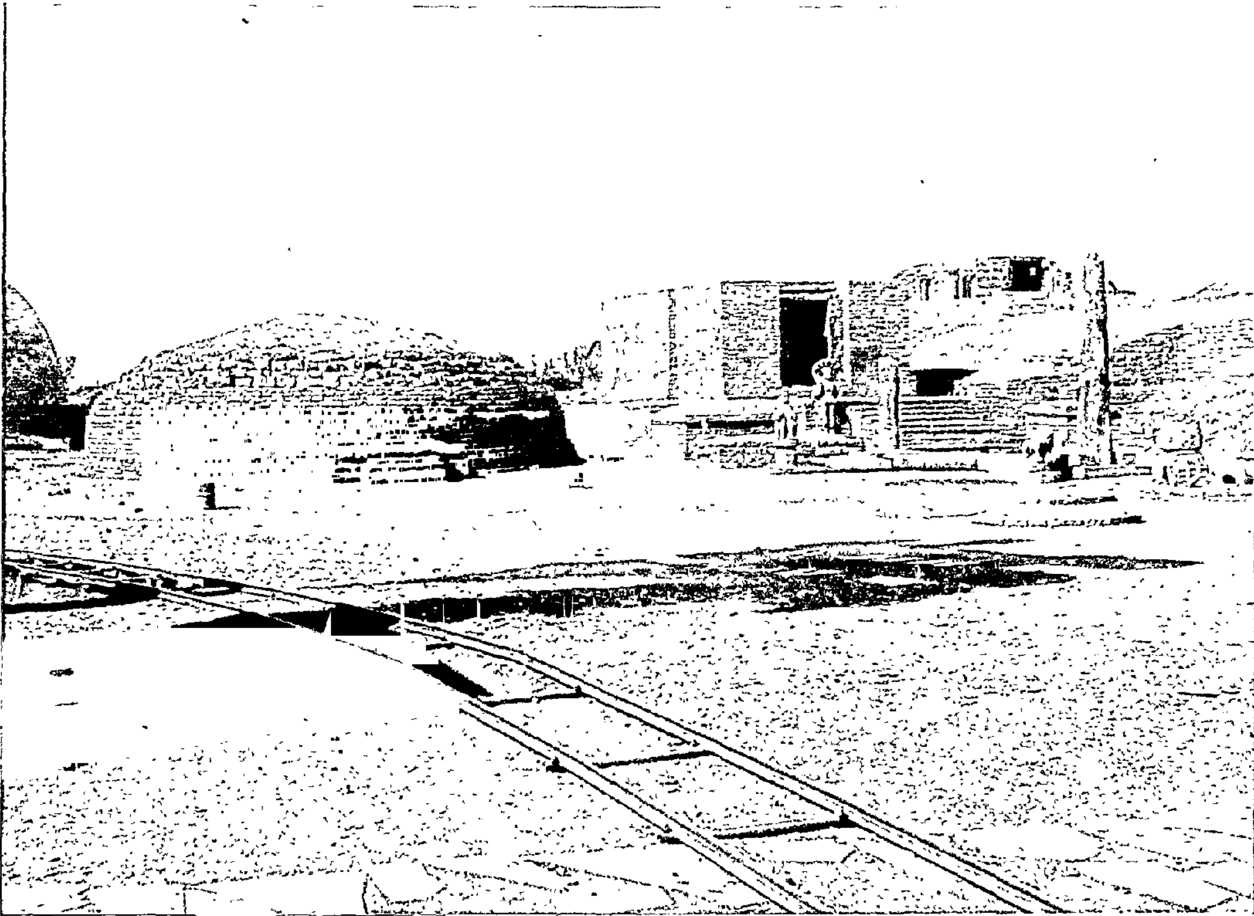
The Persepolitan capital and square abacus ornamented with a balustrade in relief measure 6′ 1″ in height and are cut entire from a single block of stone.[1] So, too, was the statue which Cunningham and Maisey found lying alongside the capital and which is believed to have belonged to the same pillar. This statue, which like the capital, is of grey Nāgaurī stone,[2] is that of a Bodhisattva(?) in a standing attitude ; it is clad in a *dhotī* and adorned with bracelets, earrings, bejewelled necklace and head-dress. The hair falls in curls over the shoulders and back, and beneath it at the back fall the ends of two ribands. An interesting feature of this statue is the halo, which is pierced with twelve small holes evenly disposed around its edge. Manifestly the halo, as we now see it, is too small in proportion to the size of the statue, and these holes were no doubt intended for the attachment of the outer rays, which were probably fashioned out of copper gilt, the rest of the statue itself being possibly painted or gilded. That this statue stood, as Cunningham and Maisey say, on the summit of the pillar, I see no reason to doubt, and that it is a work of the Gupta period, needs no demonstration to any one familiar with the history of Indian sculpture.

Pillar 34. The fifth and last pillar to be noticed is No. **34**, which used to stand in the recess on the south side of the east gateway of the Great Stūpa.[3] Nothing of this pillar is now left *in situ*, but a drawing of it, as it stood intact is 1851, is reproduced in General Maisey's work,[4] and two pieces of it were found by me lying among the débris round the stūpa. One of these comprises the bell capital with its cable necking and 8½″ of the shaft beneath ; and the other the crowning lion and circular abacus on which it stood. These carvings clearly belong to the Gupta school, but compared with other contemporary works their execution is rough and clumsy, and the design of the double capital is singularly bizarre and degenerate.

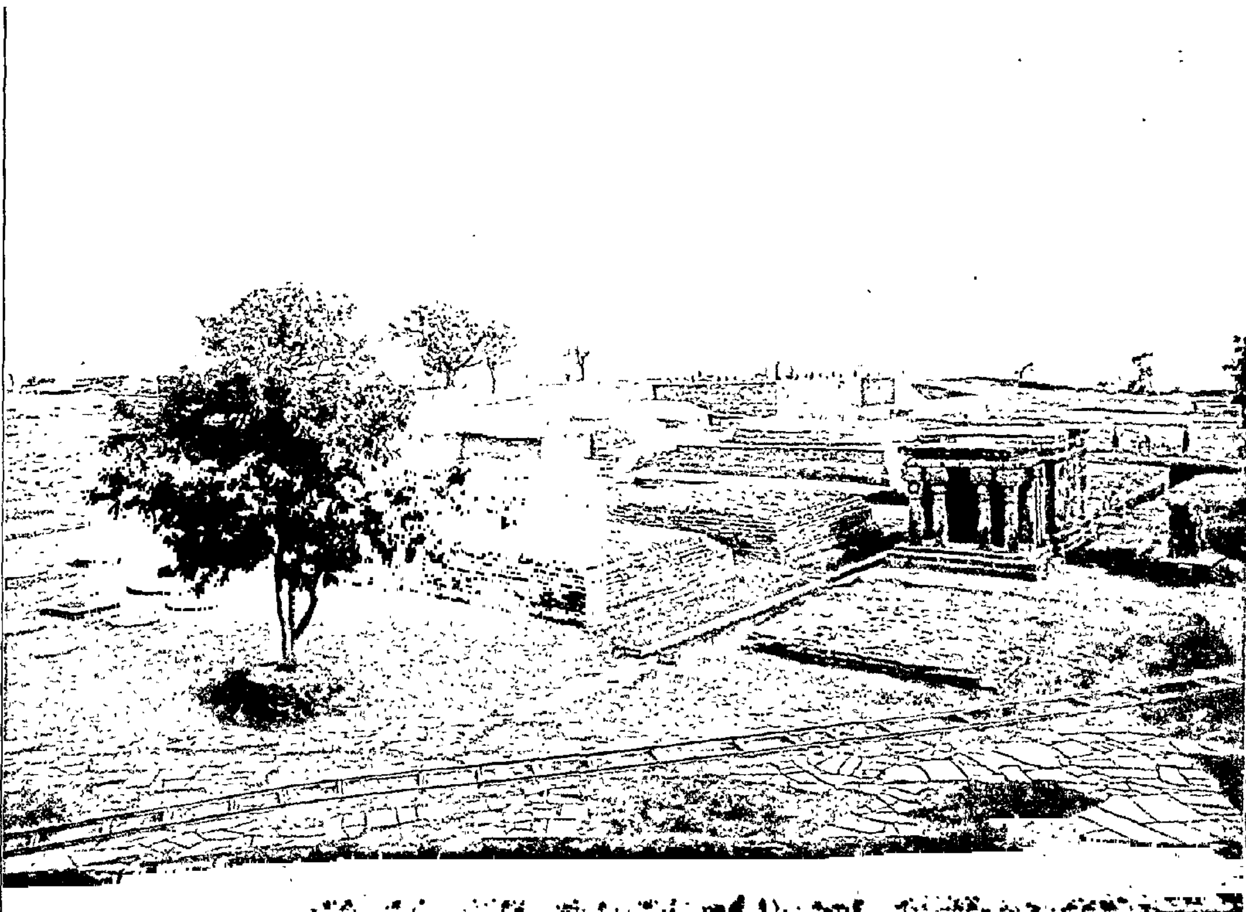
Temples.

Temple 18. Of the several temples on the central plateau the most important in point of size and interest is the one numbered **18** on the plan, which is situated on a low terrace directly opposite the south gateway of the Great Stūpa. Hitherto this temple has been thought to consist of an apsidal chamber enclosed by a solid stone wall and of a rectangular nave in front encompassed on three sides by a colonnade with a small

[1] Maisey *Sanchi and its remains*, Pl. XXXII, fig. 2.
[2] The shaft and plinth are of Udayagiri stone.
[3] At the spot indicated by the letter N in General Maisey's plan (Pl. I).
[4] Pl. XXXIII, fig. 2.

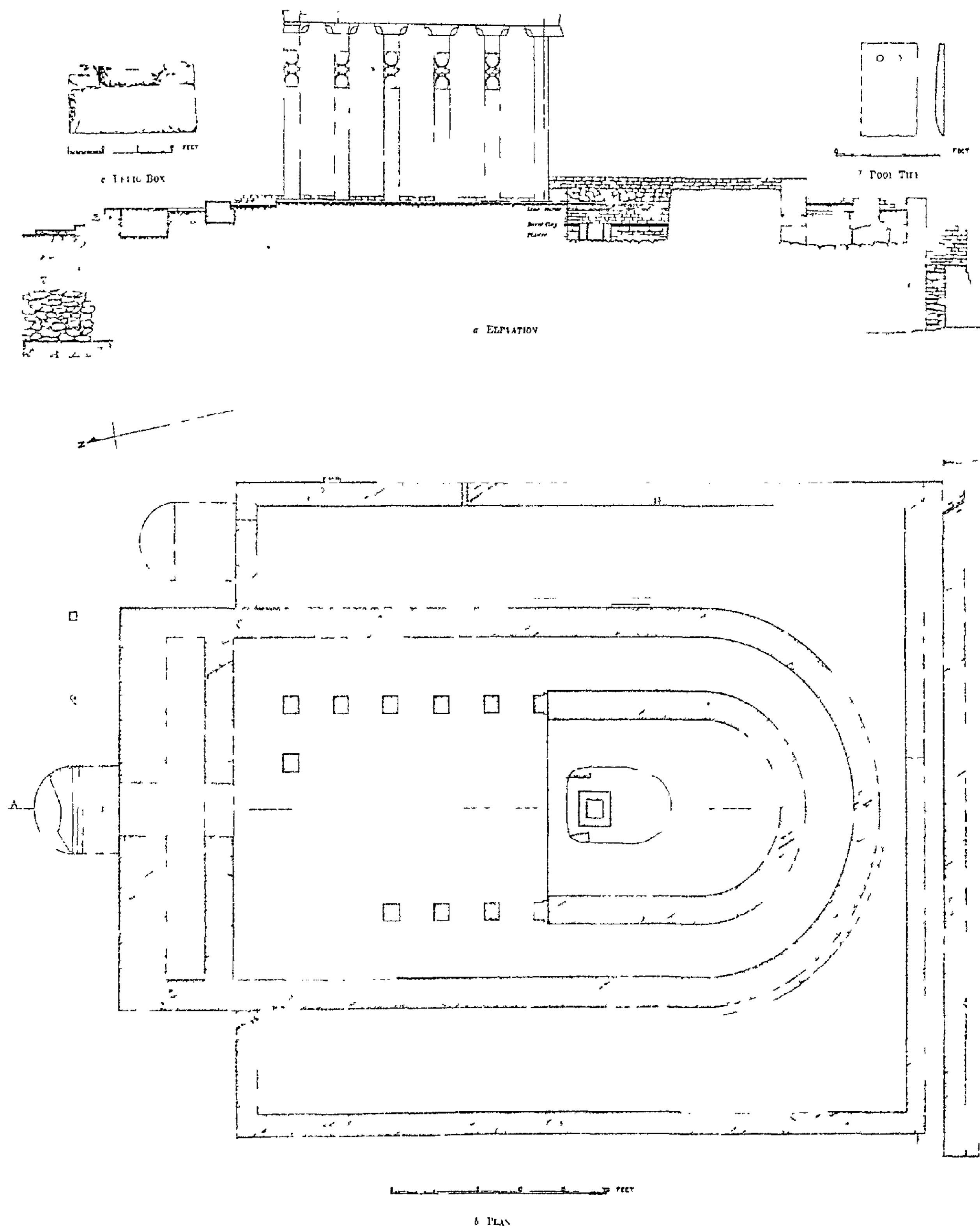


a. Stupa 5 and Temple 31 from south-west,



b. Temple 17 and Stupas 6, 11, 12, 13 and 14, from north-west.

EXCAVATIONS AT SANCHI TEMPLE 18



a Elevation

b Plan

portico at the entrance.[1] Excavations, however, have now revealed the existence of an outer wall enclosing an aisle or *pradakshiṇā-patha*, which runs continuously around both nave and apse, and also of an ante-chamber which extends across the whole width of the building. The plan, in fact, of this building (Plate XIII) turns out to be similar to that of the rock-cut chaitya halls at Karle and elsewhere, with this noteworthy difference—that in this case the apse is enclosed not by columns, as in the cave temples, but by a solid wall, the difference being due, of course, to the fact that in a free standing building light could be admitted to the aisles through windows in the outer wall. How these windows were arranged and what were their dimensions and number, there is now no means of determining, since the outer wall is standing to a height of less than two feet above the interior floor-level ; but we shall probably not be far wrong, if we assume that they followed approximately the same disposition as the windows in the great Jaṇḍiāl temple at Taxila, which are spaced at even intervals to the number of 8 in each side and 4 in the back wall. The inner wall around the apse is 3′ thick and constructed of dry stone masonry similar to that employed in the mediæval stūpas described above. Its foundations, which descend only a few inches below the floor level, rest on a layer of débris about a foot thick, but beneath this layer is another earlier wall which follows the same alignment as the latter and rests on a solid foundation of boulders. The outer wall is of the same construction and in the forepart of the temple is also founded on loose débris, but at the back of the aisle rests on the remains of an earlier wall.[2] The pillars and pilasters of the nave are monoliths square in section and 17 feet high, slightly tapering towards the top. They are not sunk in the ground but rest on foundations of stone, which in themselves are not very strong or secure, the architect having relied upon the wooden timbers of the roof to tie the pillars together and thus maintain them in position. This, no doubt, they did, so long as they were intact, but since their collapse three of the pillars at the north-west corner and the pilaster on the western side have fallen and the others were leaning at parlous angles, being saved from falling only by the heavy architraves above them (Plate XV*a*). The curious and interesting design carved on the four faces of these pillars, which has the appearance of being left in an unfinished state, was a favourable one at Sāñchī in the 7th century A.D., and is found in buildings of the same age in places as far remote as Ellora in the Dekhan and Aihole in the Dharwar District of the Bombay Presidency, but is not, so far as I am aware, found in any architecture of a later period. These pillars indicate 650 A.D. as approximately the date when this temple was erected and this date is confirmed by other considerations, notably by the structural character of the walls, by the subsequent additions which were made to the temple and by the succession of earlier structures which had stood here before it was erected. Of the later additions referred to one is the stone filling in the apse, and another the stone jambs of the inner doorway, of which the eastern one was still standing a few years ago. This jamb, which is of Udayagiri stone in contradistinction to the pillars of the interior which are of Nāgaurī stone, is adorned with sculptures in relief, the style of which proclaims it to be a work of the 10th or 11th century A.D.

Within the apse of the temple there once stood a stūpa, the remains of which were

[1] *Vide* Fergusson, *Indian and Eastern Architecture*, 2nd ed., Vol. I, p. 126.

[2] The line of demarcation between the earlier and later masonry is not indicated in the section on Pl. XIII.

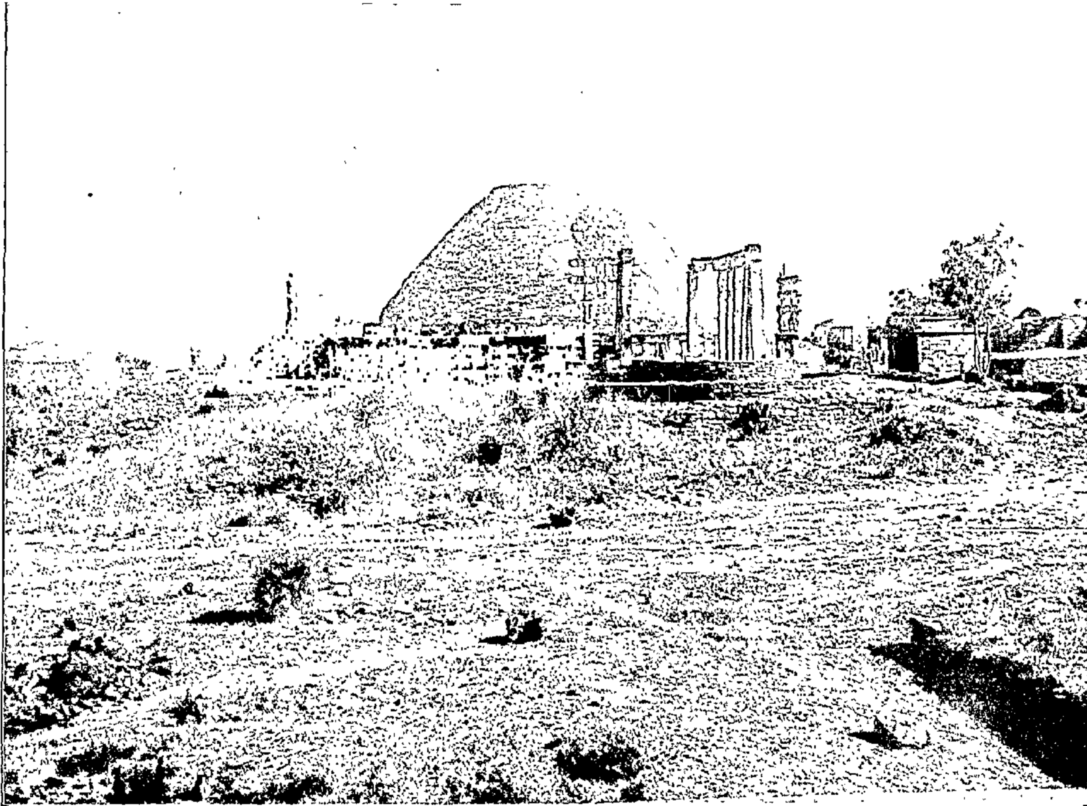
found by General Maisey in 1851, and among the remains a broken steatite vase[1] which may be assumed to have contained relics. The stūpa appears to have stood well back in the apse, and, like the walls of the temple, to have been built on very shallow foundations; for all trace of it has now vanished. The floor of the temple was paved with stone flags; and stone flags also were used for paving the small court in which the temple stands. From the ground plan on Plate XIII it will be seen that this court is not of sufficiently large dimensions to comprise the whole side of the temple, the antechamber of which projects beyond its northern wall, and that no direct communication, therefore, existed between the temple and the court, the only entrance to the latter having apparently been in the short length of wall on the eastern side of the temple. At this point there are the remains of an entrance in the shape of a "moonstone" slab, but it looks as if this may have belonged to an earlier structure on the same site.

Of the minor antiquities found in this temple the only ones that deserve particular mention are a number of terracotta tablets of the 7th or 8th century A.D., which were found in a heap on the floor of the aisle on the eastern side of the apse. They are of varying sizes but of an almost uniform pattern, each being stamped with two separate impressions and roughly adorned around its edge with a scalloped border. In the lower impression, which is the larger of the two and shaped like a *pīpal* leaf, is the figure of Buddha seated on a lotus throne in the *bhūmisparśa mudrā,* with miniature stūpas to the right and left of his head and the Buddhist creed in characters of the 7th or 8th century A.D. to the right and left of his body. In the upper impression, which is oval or round in shape, the Buddhist creed is repeated.

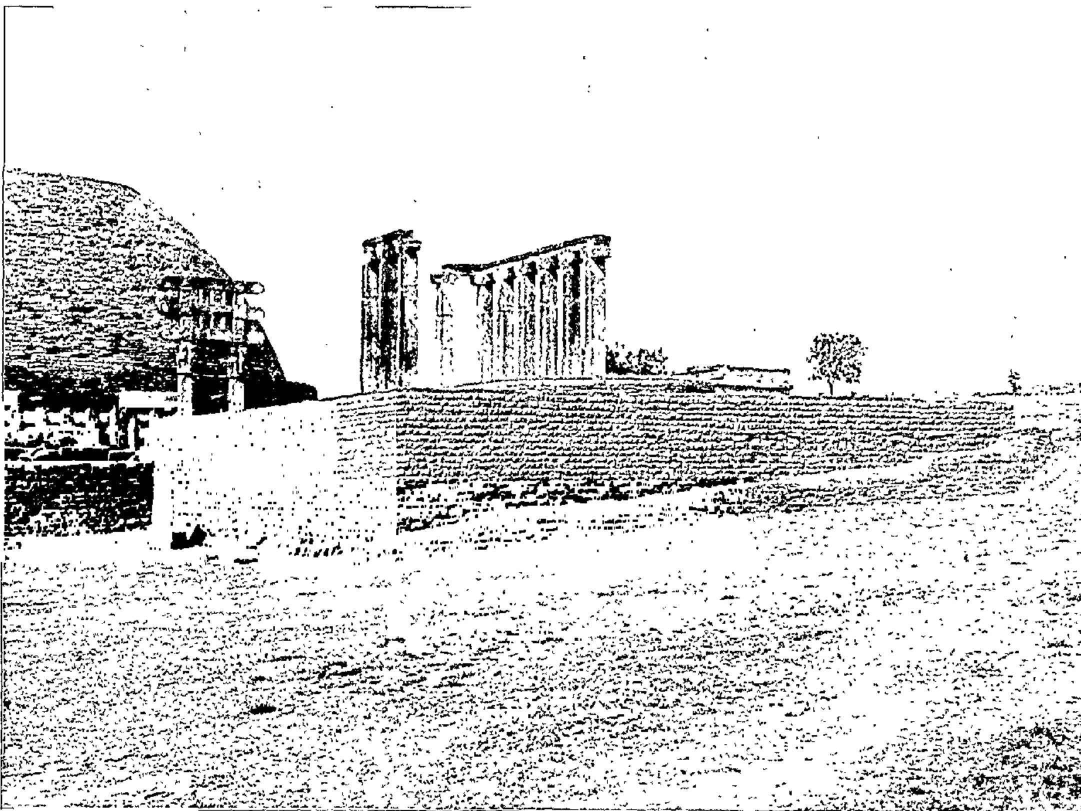
In speaking of the age of this temple I have alluded to the existence of earlier structures on the same site. The remains of these structures consist of a series of floors separated by layers of débris beneath the floor of the apse; of stone foundations beneath the walls at the back of the apse and aisle; and of stout retaining walls around the temple enclosure dating back to the Maurya period. The relative positions of the several floors in the interior of the apse, which I exposed by enlarging a pit sunk by some previous explorer, are clearly indicated on the section in Plate XIII*a*. Starting from the top, I found, first, a layer of stone débris which had been used to raise the level of the stone floor of the apse; then came the stone floor itself; next, a layer of débris, and below this a second floor of concrete laid on a foundation of *bajri* and overspread with a thin coating of lime; beneath this, again, another stratum of débris and a third floor of pounded clay much burnt; then a further accumulation consisting of earth and stones above and of burnt brick and plaster mixed with charcoal below; and, lastly, a fourth floor consisting of six inches of pounded clay covered by a thin layer of plaster. To judge by the remains in other parts of the site, the second of these floors, composed of lime concrete, is to be assigned to the fifth or perhaps sixth century A.D.; the third to the 1st or 2nd century B.C. and the fourth to the Maurya epoch. Like the original *bajri* floor around the pillar of Aśoka, this last floor is laid on a foundation of stone boulders extending down to the natural rock, but, inasmuch as it was intended for the interior of a covered building, it was composed not of coarse *bajri* but of lime plaster over a layer of pounded clay. To the same age as this early floor belong also the early retaining walls on the east, south and west of the temple

[1] *Sanchi and its remains*, p. 74.

EXCAVATIONS AT SANCHI.



a. Temple 18, from south before excavation.



b. Temple 18, from east after excavation and repair.

Photo-Engraved & printed at the Offices of the Survey of India, Calcutta, 1916

compound and along the edge of the central plateau to the west of it. On this side of the plateau the natural rock shelves rapidly away towards the south, and in order to provide a level terrace for their structure the Maurya architects had to erect massive retaining walls and then level up the enclosed space with a filling of heavy stone boulders and earth. These retaining walls are well illustrated in Plate XIV. They are constructed of hammer-dressed blocks similar to those used at a later period for the enlargement of the Great Stūpa, and are between 2′ and 3′ in thickness by 12′ or 13′ in height. Seemingly, the retaining wall on the south side of the temple must have proved inadequate to meet the strain imposed on it; for a second wall was subsequently constructed on the outside of it and the space between the two filled in with stone boulders. This second wall, which appears to have been built very soon after the first and is also founded on the natural rock, has a thickness of over 4′ at the base with several footings on its outer side. Whether it was as high as the first wall cannot be determined, as the upper part of it has fallen.

In the angle formed by the retaining wall on the west side of the temple and the wall at right angles to it along the south face of the plateau a deep accumulation of débris had formed, much of which must have fallen from the temple terrace above. Near the bottom of this débris I found large numbers of terracotta roof tiles of the pattern illustrated in Plate XIII*d*, and along with them a broken stone begging-bowl of fine Maurya workmanship. The tiles, I think, probably came from the roof of the Maurya building, the superstructure of which, on the analogy of other edifices of that age, may be assumed to have been mainly of wood.

As to the character and design of this Maurya building, it is reasonable to surmise that it was an apsidal chaitya-hall similar to the earliest edifice on the site of Temple **40**, and it may further be surmised that its original plan was more or less adhered to in the subsequent rebuildings. It is uncertain, however, whether the earlier wall at the back of the apse or the earlier outer wall at the back of the aisle can be relegated to the Maurya age; for, had these foundations been laid by the Maurya builders, there is reason to suppose that they would have been carried straight down to the bed-rock instead of being allowed to rest on the surface of the rubble filling. It appears probable, therefore, that these foundations are contemporary with the first rebuilding. The heavy block of stone nearly four feet square and hollow in the centre, which is illustrated in Plate XIIIc, was found by me resting on the Maurya stone foundations beneath the forepart of the apse; but it had been unearthed years before by an earlier explorer and in the absence of any record it was impossible to ascertain whether the position in which I discovered it was the one it had originally occupied, nor could I determine from the character of the block itself the purpose to which it had been put.[1] To judge, however, by the workmanship as well as by the variety of the stone which comes from the Udayagiri quarries, it appears to belong to the mediæval period.

Conservation measures.

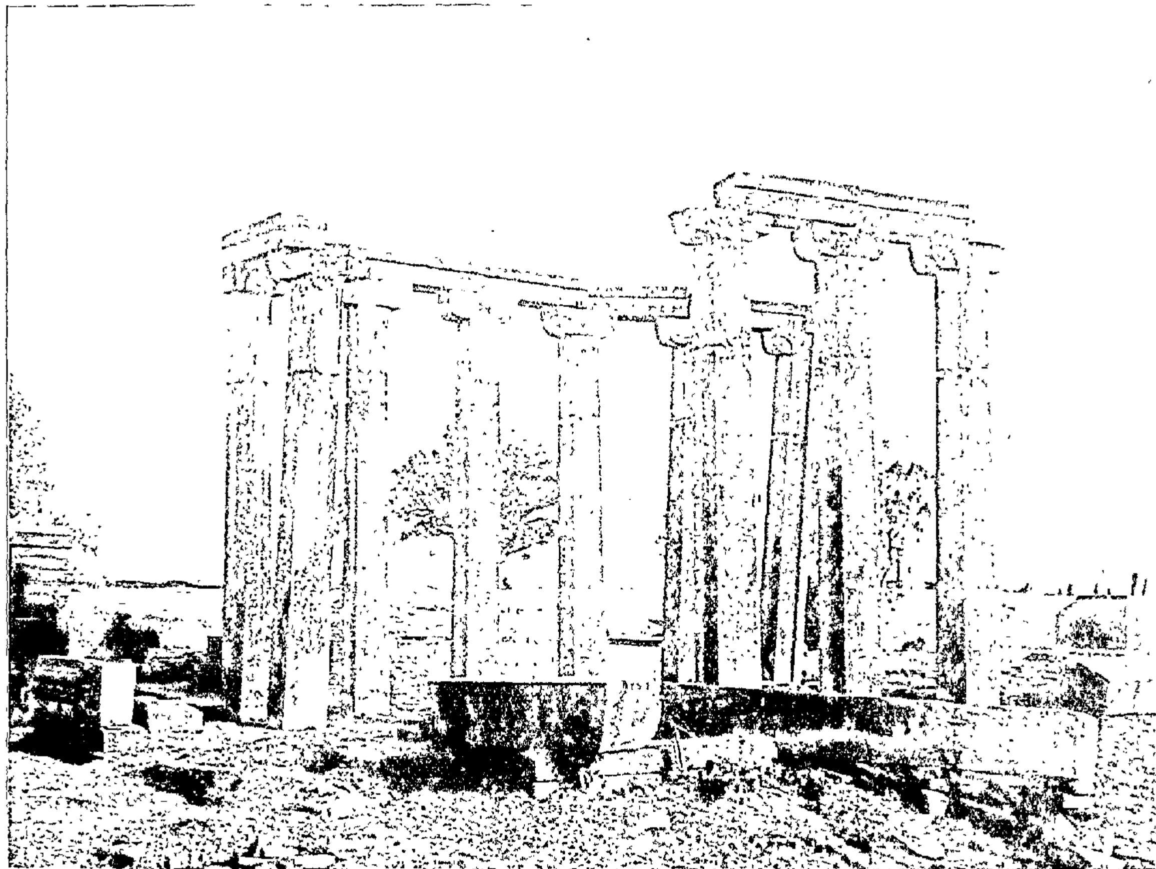
The preservation of this interesting fabric was a matter of considerable difficulty and labour, much increased owing to the impossibility of procuring adequate appliances for the work except at a wholly exorbitant cost. Several of the pillars of the nave were, as I have said, leaning at dangerous angles (Plate XV *a*), and my first

[1] In the illustration on Pl. XIIIc this hollow block of stone is entitled a relic-box; but it may be doubted if it was ever used for that purpose.

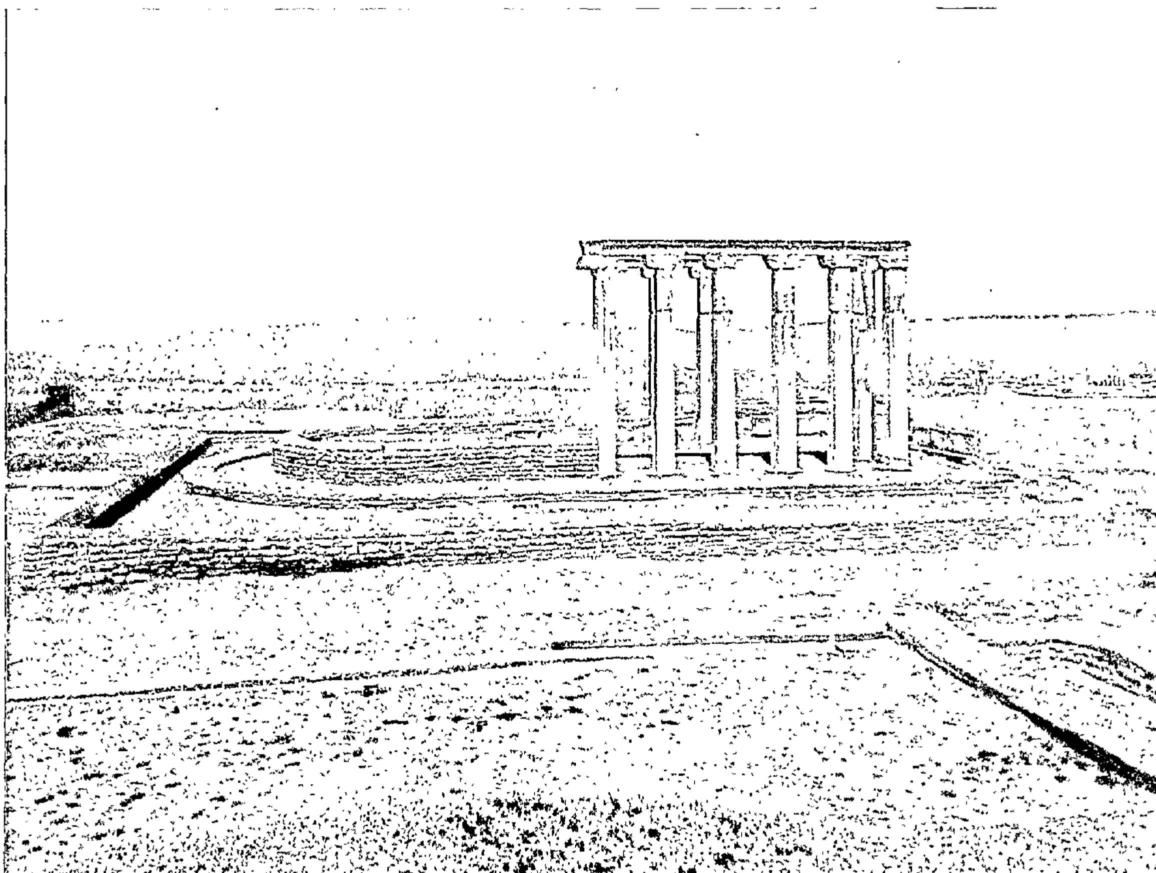
care after clearing away the débris and jungle was to reset them in the perpendicular. To achieve this without running the risk of bringing them down altogether, it was essential to have an exceptionally strong scaffolding, and, as timbers could not be obtained, I had recourse to walls of rough rubble in lime strengthened with hoop iron. The walls were erected in two lines parallel with one another inside and outside the colonnade, with short cross walls between the columns; and, in order to provide access to the base of the latter, low semi-circular arches were constructed opposite to each, in both the inner and outer walls. With this secure and solid scaffolding forming a well, as it were, around each of the columns, the remainder of the task was simplified. First of all the architraves were raised with screw jacks and held up on balk timbers, then the capitals were lifted, and the columns jacked back into the perpendicular. The foundations of the columns were next grouted with Portland cement, steel chisels driven in under their base, and grout forced under pressure into the open crevices. Capitals and architraves were afterwards lowered and reset in their correct positions and securely clamped together with copper clamps of 1″ section imbedded in lead. Besides resetting these pillars in the perpendicular, I also found it necessary to dismantle and rebuild a large part of the Maurya retaining walls on the south and west of the temple court, which were bulging outwards, and to repair in places the low walls of the temple itself (Plate XV*b*). The fallen columns, too, which were lying athwart or outside the western wall of the nave, were laid in the aisles, and the hollow block of stone in the apse was raised and placed on the floor of the apse immediately above the spot where it had been found. I felt some reluctance in adopting this course, but the only alternative would have been to bury it again in the pit in the apse, and it seemed to me preferable to raise the block to the floor level rather than to hide it altogether from sight.

Temple 17. Of the exquisite little Gupta shrine (Plate XII*b*) which stands near the north-east corner of the temple just described I have but little to say here, since it was already standing clear above ground before I started my excavations, and my efforts have been devoted almost exclusively to conserving its fabric. The walls of the shrine are unusually thick and faced inside and outside with ashlar masonry, some blocks of which run to as much as 5′ 3″ in length; but, though seemingly very strong, the core of the wall is composed of loose rubble and there are few headers in the face masonry to bond together the inner and outer faces. Moreover, the plinth is destitute of foundations (a fault common to most structures of this age), and it is not surprising, therefore, that the percolation of water into the walls resulted in the buckling of the ashlar facing and that this was followed by the partial collapse of the roof. Fortunately, the damage was not such as to necessitate any extensive dismantling of the walls. With the help of screw jacks I was able to work the displaced masonry back almost into its original beds, and by underpinning the walls—particularly at the back of the temple—and grouting the open crevices, to render it thoroughly secure and waterproof. The roof of the shrine was originally composed of very massive slabs of stone—8″ to 10″ thick—stretching from side to side across the porch and sanctum. The porch had been covered by two such slabs and the sanctum by three, of which two were broken and useless. As the cost of quarrying slabs of such large dimensions was prohibitive, I refixed the one complete slab over the sanctum and bridged the openings on either side of it with 3″

EXCAVATIONS AT SANCHI.



a. TEMPLE 18, FROM NORTH-WEST BEFORE EXCAVATION.



b. TEMPLE 18, FROM EAST AFTER EXCAVATION AND REPAIR.

Photo-Engraved & printed at the Offices of the Survey of India, Calcutta, 1916

slabs, using 10″ stones for the coping of the side walls. Besides these measures I also reset the plinth of the porch in cement, making good all gaps with cement concrete toned to harmonize with the colour of the adjacent surfaces, and reset the pillars and pilasters which were out of plumb.

Temple 9. On the opposite side of the entrance of Temple **18** there once stood another shrine of about the same age but of slightly larger dimensions than the one last described. All that is left of it *in situ* consists of the rough core of the plinth from which even the face stones have been stripped; but lying in the débris above the plinth were two large and two small stone pilasters besides various other architectural members, the style of which indicates that the structure belongs to the early Gupta age. The larger pilasters are 6′ 10″ in height with fluted vase capitals, cable necking and shafts that pass from the square to the octagon and sixteen-sided above. The smaller pilasters are of the same design and 4′ 7″ high, but the jamb on which they are carved measures 6′ 7½″ in its entirety.

Temple 31. A fourth temple on the central plateau is situated at the north-east corner immediately behind Stūpa **5** (Plate XII*a*). In this case my explorations have been productive of several discoveries which enhance the interest of the building and throw new light on its history. As previously known, this temple consisted of a plain rectangular chamber with a flat roof supported on columns, and contained an image of the Buddha seated on a lotus pedestal opposite to the entrance. Inside and outside, however, much débris had accumulated and, on clearing this away, I found that the shrine was in reality standing on a platform about 4′ in height, approached by a flight of steps on the south side and of sufficiently wide dimensions to give a projection of between 7 and 8 feet around the shrine. Further, I found that this platform had been constructed for an earlier temple which stood on the same site, and that to this earlier temple belonged also the lotus pedestal of the cult statue, which is still in its original position at a slightly lower level than the floor of the present temple. This earlier shrine must have been built in the 6th or 7th century A.D., and it is not improbable, therefore, that two of the pilasters now standing in the later building, which are similar in design to the pillars of temple **18**, and which, therefore, date from that period, had originally belonged to it. On the other hand, two of the other pillars are of the early Gupta age, and must therefore have been taken from some other structure—possibly one of those of which the plinths have been exposed beneath the long retaining wall on the east of this plateau. The cult statue inside this shrine is of reddish-brown sandstone and represents the Buddha seated on a lotus. The hands and forearms, unfortunately, are missing, but to judge from the two marks of breakage on his breast, which indicate that both hands were raised, he must have been portrayed in the attitude of teaching. Although referable to the same epoch as the pedestal on which it stands, *i.e.*, 6th-7th century A.D., it does not fit the base, and we must, therefore, presume that like some of the columns it also was brought here from some other shrine.

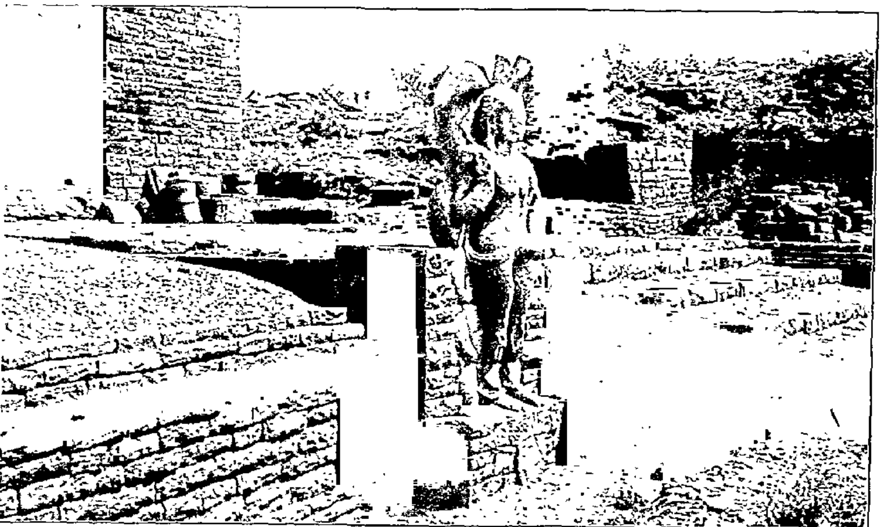
The preservation of this building has involved extensive measures. The high platform on which it stands had given way on the western and northern sides; the walls of the temple, built of the small loose masonry in vogue in the later mediæval period, had buckled outwards in several places; the columns had sunk or inclined from the perpendicular and the roof was much broken up (Plate XVI*b*). Accordingly, it

became necessary to jack up the roof, and reset the columns which supported it; to dismantle and rebuild large sections of the walls, using mortar instead of mud as a binding material; to renew the concrete on the roof top, floating it in cement, and to repair and repave the platform as well as the steps which give access to it. The two stone door jambs at the entrance had, unfortunately, entirely vanished, and as new ones were not required for supporting the lintel, the dry stone masonry at the back of the jambs was relaid in mortar, in order to prevent any further disintegration. A monument of interest which came to light during the excavations of the temple platform was a Nāgī statue, 7′ 6″ in height (including the tenon at the base), which used to stand in the angle formed by the approaching flight of steps and the face of the platform on its west (Plate XVI*a*). This statue was executed in the 4th or 5th century A.D., and, judging by the fact that the back as well as the front is worked, it must originally have stood free in a spot where it could be seen from all sides. Beneath its base is a tenon which was no doubt originally mortised into a stone plinth, but in late mediæval days, when it was set up in its present position, the plinth was discarded and the base of the statue imbedded in dry stone masonry. Subsequently the image was broken in two at a point a little above the ankles. The lower part I found still *in situ*; the upper lying a little distance away. From the indications afforded by the masonry it appears likely that there was a second Nāga statue in the corresponding position to the east of the steps.

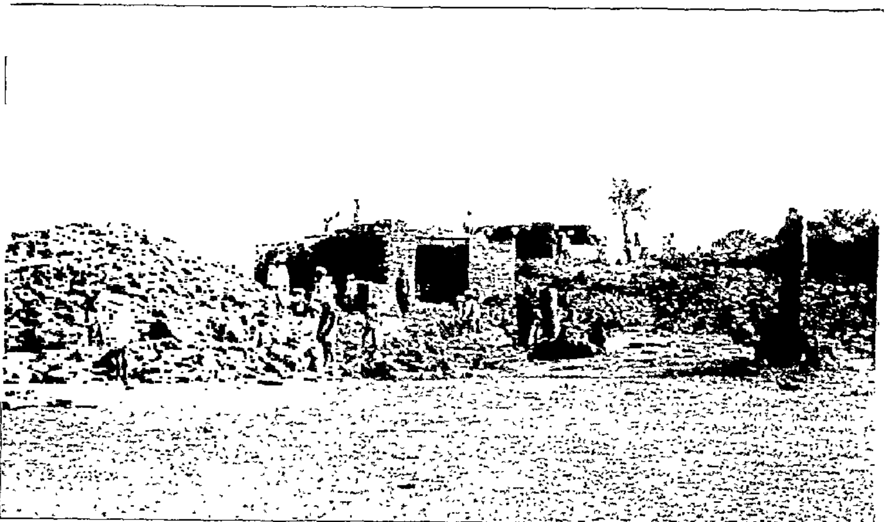
Before leaving the central plateau it remains to say a few words about the retaining wall along its eastern side and the remains of the several structures visible beneath its foundations. When speaking of the open paved area around the Great Stūpa I remarked[1] that it had once extended on the same level for a considerable distance east of this retaining wall. That was in the first century B.C., and it is probable that for the next three hundred years or even longer the pavement was kept clear of débris. Then, as the buildings in this part of the site began to fall to decay, their ruins gradually encroached more and more upon the paved area, other buildings rose over their remains and so the process of accumulation went on, until by the seventh century an artificial terrace had been formed 5 or more feet in height and extending almost to the limits of the retaining wall. It is to this period that the structures **19**, **20**, **21** and **23**, as well as the road alongside No. **20**, probably belonged. The road in question, which to judge by the worn condition of its cobble-stones must long have been in use, is 9 feet wide and rises eastward by a gradient of about 1′ in 6′. Of building **23** only the entrance with a 'moon-stone' threshold has been exposed, and the walls of buildings **19** and **20**, which are standing to a height of between one and two feet only, are composed of the ordinary rough dry stone masonry. Building **21**, on the other hand, is constructed of massive blocks of Udayagiri stone with a torus moulding at its base, which suffice to indicate that it belongs to the Gupta age. The retaining wall over the ruins of these edifices, erected when the terrace to the east had risen as high as 14 feet, can hardly be earlier than the 11th century A.D. Probably it was contemporary with the later Temple **45**. At the time it was built there must have been some accumulation of débris also on its western side; for its foundations did not descend more than nine feet from the top of the terrace. In repairing this wall I was able to underpin

Nos. 19, 20, 21 and 23.

[1] P. 12 *ante*.



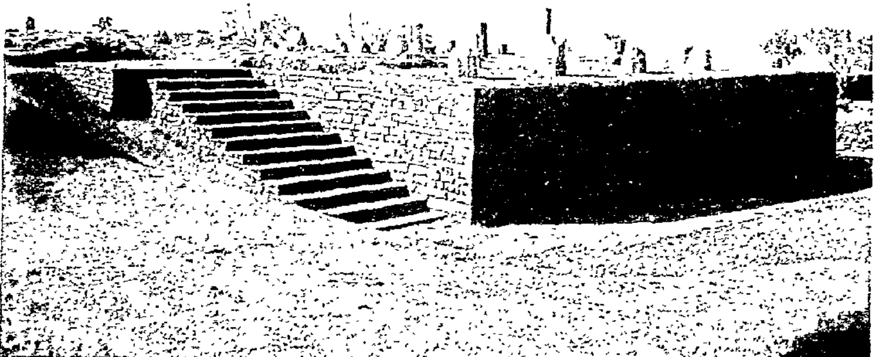
a, NAGI STATUE IN FRONT OF TEMPLE 31.



b, STUPA 5 AND TEMPLE 31, DURING CLEARANCE AND REPAIR.



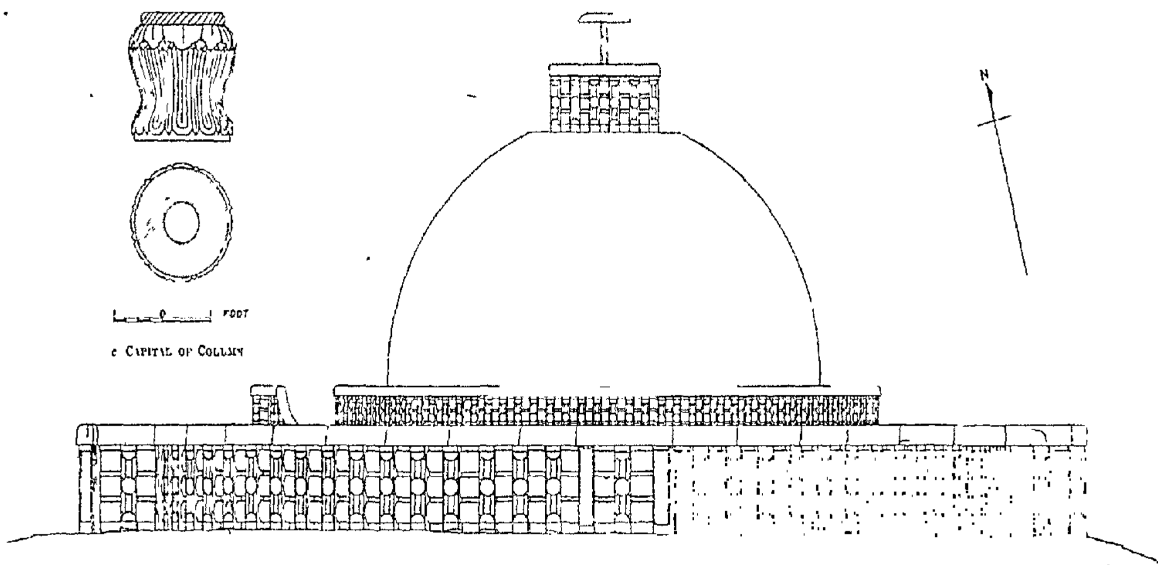
c, TEMPLE 40 IN COURSE OF EXCAVATION.



d, TEMPLE 40, FROM NORTH-WEST, AFTER EXCAVATION AND REPAIR.

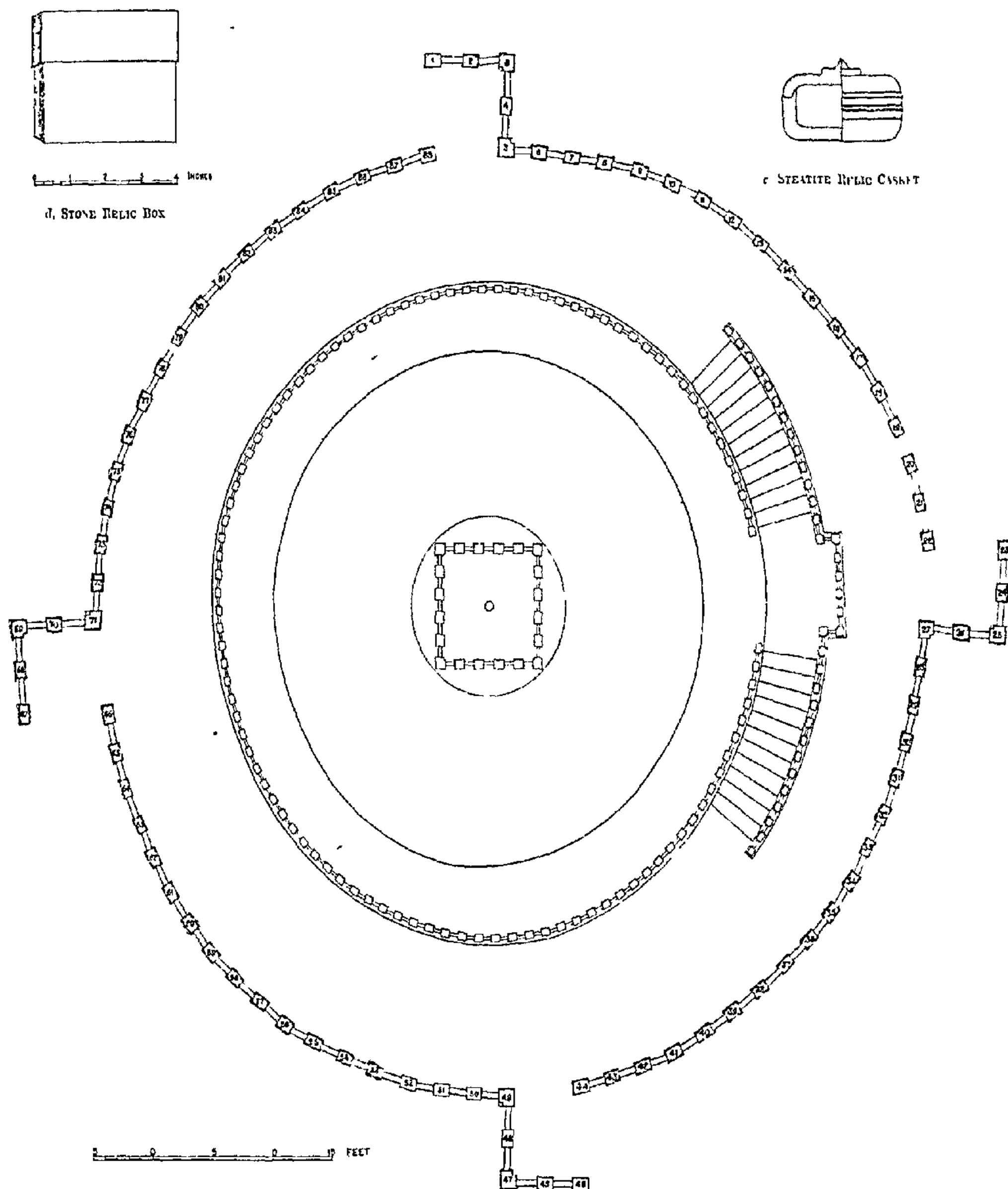
Photo-Engraved & printed at the Offices of the Survey of India, Calcutta, [illegible]

EXCAVATIONS AT SANCHI: STUPA 2.



c Capital of Column

a, Elevation



d, Stone Relic Box

e Steatite Relic Casket

b Plan

and bank up that section of it which is north of the modern flight of steps leading to the upper plateau. The rest I found it necessary to dismantle and rebuild completely, carrying th foundations another 7′ lower down.

STŪPA 2 AND ADJACENT REMAINS.

I have now completed my description of the monuments on the central plateau, but before proceeding to the groups adjoining them on the south and east, I shall ask the reader to accompany me to the ledge of rock some 350 yards down the western slope of the hill, on which Stūpa 2 is situated. The pathway, which now leads down to this ledge, is reached by a steep flight of steps built against the retaining wall of the plateau opposite the western gateway of the Great Stūpa. These steps are of modern origin, the old road, which was paved with heavy slabs of stone, having gone further south and followed a more devious course. Apparently, it started immediately to the south of Stūpa 7; then skirted the edge of an old quarry subsequently converted into a tank, and swept round in a large curve to Stūpa 2, a little above which it is joined by the modern road. Along it, on either side, can still be traced the remains of various monuments, the most noteworthy of which is the ruined base of an apsidal temple, about 61′ long and 32′ 6″ wide, with its entrance towards the east. The other remains are mere ruined platforms of rough stone masonry from which the superstructures have disappeared. Three of these are situated to the west and north-west of the apsidal temple, and a fourth to the east of it; then there is a fifth nearly 70 yards north of the last mentioned on the opposite side of the old road; and two more close together on the north side of the road, some 80 yards higher up. North of these, again, and partly cut through by the modern road is an extensive mound of stone rubble and brick, which marks the site of a mediæval monastery, and near by it, on the west, is a smaller mound with a massive stone bowl on its summit. It was surmised by Cunningham that this bowl, which has an outer diameter of 8′ 8″, once held a holy nettle which Buddha himself was reputed to have bitten off and planted.[1] There are no grounds, however, for this surmise, which depends in the first instance on the false identification of Sāñchī with the Sha-chi of Fa-Hien; probably the bowl was a gigantic begging-bowl in which the faithful could place their offerings. Stūpa 2.

On the square terrace[2] round about the Second Stūpa and on the rocky ledge adjoining there is no scope for further digging, and my work here resolved itself into collecting and piecing together the various architectural members which had fallen from the stūpa and were lying buried in earth or jungle on the slopes below. These members include numerous pieces from the ground, stairway, terrace and *harmikā* balustrades, and they leave no doubt that Stūpa 2 was adorned in the same manner as the Great and Third Stūpas described above. The plan and elevation of Stūpa 2, restored in accordance with the data furnished by the new material, are shown on Plate XVII, and on the same plate I have reproduced Cunningham's drawing[3] of the stone relic box and one of the steatite caskets, which he and Lieutenant Maisey

[1] *The Bhilsa Topes*, pp. 180-82.

[2] This terrace is constructed in the usual way with a core of heavy rubble stones supported by retaining walls which project out from the western slope of the hill. It measured about 120 feet square and had an elevation of 9′ 6″ on its western side.

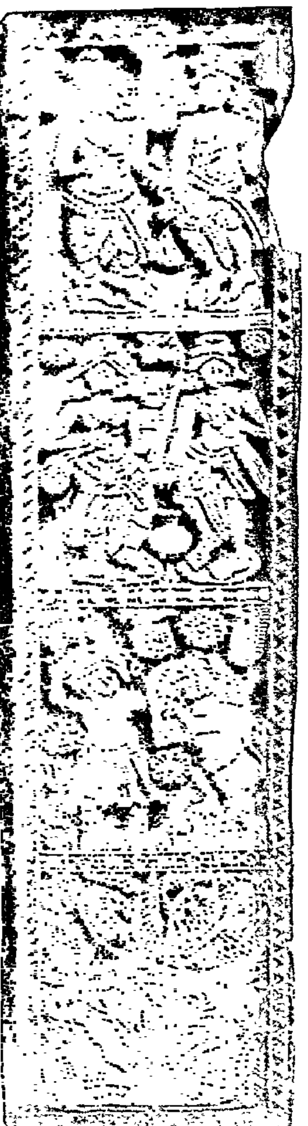
[3] *The Bhilsa Topes*, Pl. XX, and pp. 285-92.

discovered in the stūpa in 1851. The various balustrades of this stūpa which I have now been able to piece together, are of the same types as the balustrades already described of Stūpas 1 and 3, and their construction calls for no further comment. The following minor points, however, connected with their decoration deserve notice. With the exception of the newel posts, which are more elaborately adorned, the pillars of the stairway balustrade are relieved on both their inner and outer faces with one complete and two half rosettes of varying pattern. Similar rosettes are found also on the inner face of the landing balustrade, but the outer face of this balustrade is further embellished with narrow perpendicular bands of carving between the discs or with still more elaborate designs in the case of the corner pillars. The terrace balustrade, on the other hand, has merely plain discs on its inner face, of which the centre one is occasionally omitted. The discs on the outer face are adorned with lotus designs and other floral or animal devices: for example, a lion, a bull or an elephant. The coping of the *harmikā* balustrade is decorated on its inner face only with a row of full-blown lotuses. The corresponding coping of Stūpa 3 is adorned on its outer, not on its inner, face.

Reliefs on ground balustrade.

It is not my intention here to discuss in detail the sculptures on the balustrades of this stūpa, but there is one feature of the sculptures on the ground balustrade which deserves particular notice. I refer to the marked superiority of a few among the reliefs, such as those illustrated on Plate XVIII *a* and *c*, over the rest, two typical specimens of which are reproduced in figures *b* and *d* of the same plate. This superiority has been commented on by previous writers, but little attention has been paid to it, and it has commonly been presumed that all the reliefs were the products of the same school of art. A glance at the four illustrations in Plate XVIII will suffice, I think, to convince the reader that this presumption is untenable. In figures *b* and *d* the designs are decorative enough and well adapted to their purpose, but the technique of the relief is rudimentary to a degree. Thus, the figures are kept almost in one plane, with practically no effort towards spatial effect, and each is portrayed almost as a silhouette sharply defined against the separate plane of the back-ground, such modelling as there is being effected by rounding off the contours of the silhouette or the interior details. The forms, too, are splayed out and distorted, and the force of mental abstraction on the part of the artist—always a sure proof of rudimentary work—is evidenced, as it is so often in the Bharhut sculptures, by the treatment of the feet, which, irrespective of anatomical accuracy, are turned sideways and presented in their broadest aspect. The same primitive workmanship is observable also in the semi-circular designs at the top and bottom of figure *a* and at the bottom of figure *c*. But the remainder of the two latter reliefs are of quite a different order. They are the work of artists who were copying direct from nature and were all but free from the trammels of the 'memory image.' The designs are pictorial rather than purely decorative, and exhibit very considerable skill in the matter of spatial effects. The modelling of the figures is organically true, there is comparative freedom in their poses and composition, and a conscious effort to bring the figures into close relationship one with the other. These and other no less striking differences between the two classes of reliefs had satisfied me on my first examination of them that they could not both be the creations of one school; and it was with no surprise, therefore, that I subsequently discovered that all the pillars

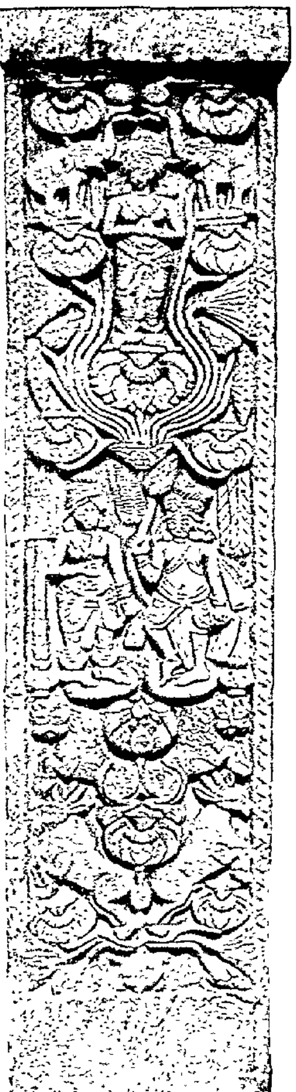




b



c



d

a—d RELIEFS ON GROUND BALUSTRADE.

of the balustrade had originally been carved with reliefs of the more primitive type, and that some of these had been chiselled off in whole or in part to make room for others of a more developed character. When this took place and how long a time had elapsed since the earlier carvings had been executed, are questions which at present defy a precise answer. What, however, is quite clear, is that the later work is deeply influenced by the Hellenistic spirit, more so than any other carvings on the balustrades or toraṇas of these stūpas, and it is, therefore, a reasonable inference that these particular panels were the work of artists from the north-west of India, who had come more directly under Hellenistic influence and reached a stage of relative maturity at a time when the local school of Vidiśā was still in its infancy—in which case it is legitimate to suppose that no long interval of time separated the later from the earlier work.

Minor remains.

To the N.-N.-W. of Stūpa **2**, and jutting out from the hill side towards the west, is a rectangular platform constructed of stone, measuring 27′ from north to south and 24′ from east to west. This platform served as the plinth of a pillar, the stump of which is still *in situ*, while several broken pieces of it together with part of its lion capital (Plate XVIIc) are lying at the side. The shaft of the pillar is octagonal at the base with a diameter of 2′ ½″, and sixteen-sided above, each side being slightly fluted. The lion has a height of 2′ 1″ and a width of 3′ 6″, without the head. Judging fron its style, this memorial appears to have been erected in the 2nd or 3rd century A.D. Lying on the same platform were a few cross-bars belonging to a small stone balustrade, and to the north of it a heap of boulders marking the site of a fallen stūpa.

SOUTHERN AREA.

From Stūpa **2** we shall now retrace our steps to the summit of the hill and resume the description of the remaining buildings, first in the area to the south and then on the higher plateau to the east. Of the remains in the southern group the most important certainly, as well, probably, as the most ancient, is the great temple numbered **40** in the plan, which like all the other structures in this part of the site was completely buried from view when I started my excavations (Plate XVIc). In its original form this temple was an apsidal chaitya-hall, and, inasmuch as it dates back to the Maurya age, it is the earliest structure of this type of which any remains have been preserved to us. The plan and section of the original building as well as of the additions subsequently made to it will be readily understood from the drawings on Plate XIX and the photograph on Plate XX. What is left of the original structure consists of a rectangular stone plinth, 11′ high and 87′ long by 46′ wide, approached by a flight of steps on its eastern and western sides. In the outward aspect of this plinth, there was nothing to indicate that its superstructure had taken an apsidal form, but, when I came to examine the core of the apparently solid masonry, I found that it was composed in reality of two distinct walls with a filling of débris between, and that the interior face of the outer wall was curved at the southern end in the form of an apse, the inner wall corresponding to it in shape. In both cases the masonry was strikingly rough, and it was clear that the walls were intended to do duty only as foundations; but the plan of these foundations left no doubt that the superstructure had been a chaitya-hall resembling in appearance the great rock chaitya-halls at Bhāja and other places in Western India, though with this noticeable difference, that, whereas the latter are provided with one or more

Temple 40.

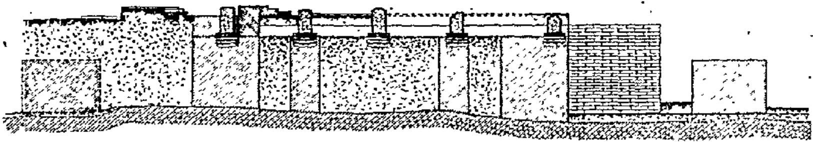
entrances directly opposite the apse, this structural hall at Sāñchī had an entrance in its two longer sides—a feature which recalls to mind the Sudāma and other Maurya cave shrines in the Barābar Hills. That the superstructure was mainly of wood and was burnt down at a relatively early age, is evident from the fact that no vestige of it had survived except some charred remains of timber, which I found on the original pounded clay floor of the building. Of the approximate date at which this conflagration took place, some indication is afforded by the stone pillars which were subsequently set up on the same plinth. These pillars are ranged in five rows of ten each without reference, apparently, to the foundations of the original structure, and it is a reasonable inference that, by the time they were erected, the plan of the original had been forgotten. Seeing, however, that the pillars in question bear records carved upon them in the early Brāhmī script, they can hardly be assigned to a later period than the beginning of the Christian era, and they may, indeed, be considerably older than that. Hence it may reasonably be concluded that the original structure was probably erected in the Maurya period—a conclusion which is corroborated both by the character of its construction and by the absence of any débris between its foundations and the natural rock.

At the time when the stone columns were set up, the original plinth was much enlarged by erecting a thick retaining wall on all four sides of, but at some distance from, it and filling in the space between with heavy boulders and worked stones probably from the earlier building, among which I may notice the broken image of an elephant in the round of very superior workmanship. The effect of these measures was to increase the length of the plinth to 137 feet and its width to 91 feet. At the same time the height of the floor was raised by about 1′ 4″, and a pavement was laid constructed of slabs measuring 6′ to 8′ in length by some 3′ 6″ in width. On three sides—that is, on the north, south and west of the enlarged plinth—are projections of varying dimensions, and it may be surmised that there was a similar projection also on the eastern side, which has not yet been excavated. Of these three projections, the northern and western ones are contemporary with the retaining wall, but the southern one, which has an irregular plan and is not bonded with the retaining wall, appears to have been added later. Still later, again, are the walls abutting on to the eastern and southern sides of this projection.

By this enlargement of the older plinth the two stairways that lead up to it on its eastern and western sides were buried from view, and their place was taken by two new flights constructed in the northern retaining wall—the thickness of the wall being more than doubled for the purpose. Similar stairways are also found built into the end wall of the temple at Sonārī, which is to be ascribed to about the same age as this reconstruction.

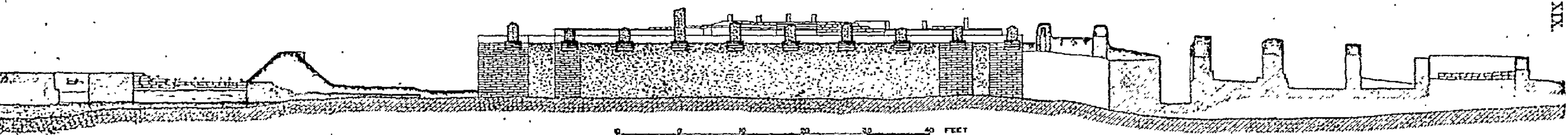
I have said that the octagonal stone columns of this hall were disposed in five rows of ten each and this is the disposition shown in the plan on Plate XIX. So far as these fifty columns are concerned their arrangement is not open to question, since many of the broken shafts of the columns were found *in situ*. On the other hand, it is quite possible that the number of columns in the hall was considerably over fifty, the extra ones having constituted one or more rows at the sides or ends of the existing group. Indeed, at first sight it appeared as if this must have been the case; for in the débris round about the building I found a number of other broken pillars of precisely similar pattern to those *in situ*, which might reasonably be assumed to have stood on the enlarged

EXCAVATIONS AT SANCHI: TEMPLE 40.



b, SECTION ON C. D.

a, PLAN.



c SECTION ON A. B.

plinth and to have been thrown down when the upper part of the later retaining wall collapsed and brought down with it some six or more feet of the boulder filling behind it. This assumption, however, is not free from objection, for the reason that every shaft without exception is broken and that most of the pieces are only three or four feet in length ; so that those which were found lying in the débris may in reality have been the upper sections of the pillars still *in situ*, and what appear to be their rough bases may have been nothing more than the unfinished tops of the shafts. I mention this alternative hypothesis, not because I regard it as convincing or even probable, but because the evidence is not such as to demonstrate conclusively that there were more than fifty columns ; and in default of such conclusiveness I have thought it better to indicate on my plan only those pillars which were actually found *in situ*. From this plan the reader will observe that the majority of the pillars are set on the foundation walls of the original plinth, but in every case, whether they stood on the older foundations or not, special foundations were laid for them consisting of stone slabs of varying thickness, laid one above the other with earth and small stones between. The top of these foundations, which are similar in character to the foundations of the ground balustrade of the Great Stūpa, coincided roughly with the floor level of the old apsidal hall, but by the time the stone pillars were erected the floor level had risen by about 1′ 4″, and the bases of the pillars were buried to that depth in the débris between the two floors.

Besides the large octagonal pillars I found also a number of small ones of about the same age, square below and octagonal above, with donative inscriptions in early Brāhmī engraved on some of the shafts. Some of these pillars were ranged in a row alongside the eastern edge of the old plinth, but this position could not have been the one which they had originally occupied ; for the dressed faces of their shafts proved on excavation to extend some distance below the level of the earliest clay floor, and—what is still more significant—broken pieces of the larger octagonal pillars were found built into their foundations, thus demonstrating that they had not been set up here until after the taller columns had fallen. What their original position was can only be surmised. Possibly they were intended to support an open verandah around the main body of the hall, or possibly they had been employed in a subsidiary structure on the south side. Wherever they may have stood, it is clear from their rough bases that it was on the ground floor and not in an upper storey. Another point of uncertainty is whether this pillared hall was ever brought to completion or not. To judge by the distance (about seven feet) between the octagonal pillars it seems probable that architraves of stone rather than of wood were intended ; but there was not a trace either of architraves or of capitals or of any other architectural feature except the columns ; nor, on the other hand, was there any trace of burnt timber on the upper floor. Hence it is reasonable to infer that the building of the second edifice never got further than the erection of the columns. At a later date, that is, about the 7th or 8th century A.D., a shrine with a portico and entrance facing the west was constructed on the eastern side of the plinth, and it was probably at this time that the smaller square columns were set up in the position described above. The three steps which gave access to the portico of this shrine will be seen on the ground plan directly over the eastern aisle of the original chaitya-hall, the bases of the stone pillars in front of them having been cut off short at the floor level, so as not to interfere with the entrance. The portico itself

has an inner measurement of 24 feet from north to south by about 9 feet east to west. Behind it were some few remnants of the walls of the shrine.

Building 8. Another early building in this area is that numbered 8 on the plan. It consists of a solid square plinth standing on the north side about 12 ′ above the bed-rock; in front of it, in the middle of the east side, is a projecting ramp with a few steps at its base, the remaining steps together with a portion of their substructure having been destroyed. This lofty plinth was constructed of masonry similar to that of the early apsidal hall described above. But in this case the whole core of the plinth is filled in solid with rough boulders and there are no interior foundation walls. In the centre of the core of this plinth General Cunningham sank a deep pit, and finding only a filling of rough boulders assumed, without discovering the plan of the building, that it was another early stūpa. In the period to which this building belongs stūpas were never built with square bases, and there is no reason to suppose that an exception was made to the rule in this case. More probably it was a square shrine with a timber superstructure, such as is figured in several of the reliefs on the gateways. In the angle formed by the south side of the stairway ramp and the east side of the plinth, a rectangular space was enclosed in later times by a wall. This wall, judging from the style of the masonry, appears to date from the mediæval period.

Monasteries 36, 37 and 38. The remaining buildings that have been exposed in the southern area are the three monasteries 36, 37 and 38. All three are built approximately on the same plan—a p'an which has already become familiar to us on many other sites in India. They consist, that is to say, of a square court-yard surrounded by cells on the four sides, with a verandah supported on pillars around the court, a raised platform in the centre of it, and in some cases with an additional chamber outside. The entrance passed through the middle chamber in one of the sides and was flanked outside by projecting pylons. The upper storey was probably constructed largely of timber, the lower storey being of dry stone masonry. All three monasteries belong to the mediæval epoch, No. 36, which is nearer to the centre of the side, being the earliest of the three, No. 38 coming next and No. 37 last.

Monastery 36. In Monastery 36 the masonry is rough and carelessly laid (Plate XX*b*). The square platform in the centre of the courtyard is covered with a layer of brick and lime concrete about 3″ thick. Round the outer edge of this platform was a low wall in which were engaged the columns of the verandah. The staircase, which gave access to the upper floor, was in the north-west corner, but only one step, worn by the passage of many feet, has been preserved. Water from the court was discharged through an underground drain covered with stone flags, which passed beneath the passage at the south-west corner. The entrance to this monastery is on its eastern side, and in front of it was an irregularly shaped compound, most of the walls of which are still traceable.

Monastery 37. The plan of Monastery 37 is more spacious and developed than that of 36, and the masonry is neater and better laid than in the latter. It is probably assignable to about the seventh century A. D. Like the square stūpas of the same age, its walls are provided with footings on the outside. At the entrance between the pylons is a square slab of stone, the purpose of which is not obvious. Built into the corners of the platform inside the courtyard are four square stone blocks which served to strengthen the masonry and support the pillars of the verandah. The chambers at the back of the cells on the south and west sides are unusual and the specific use to which they were put is not clear.

EXCAVATIONS AT SANCHI.



a. TEMPLE 40, FROM NORTH-WEST.



b. MONASTERY 36, &c., FROM SOUTH-WEST.

Photo. Engraved & printed at the Offices of the Survey of India, Calcutta, 1925.

Monastery 38 is not much later than Monastery 36, and like it is built of singularly rough and uneven masonry. Apparently there was an earlier building on this site of which some of the stone foundations still survive, and in the central chamber on the north side there is also a brick wall which was subsequently added—the bricks of which it was constructed having been taken from some older building. Instead of the usual raised platform in the middle of the courtyard there is, in this monastery, a square depression, like that in a Roman atrium, with a raised verandah round it. The stairway leading to the upper storey is in the south-west corner. The ground about this building has not been excavated, but it may be assumed that, like Monasteries 36 and 37, it also had a compound, and that the latter probably occupied the ground on its western side, since the entrance of the monastery is in that quarter. Monastery 38.

The last building to be noticed in this area is that numbered 42 on the plan, which is situated north of Temple 40. It is standing to a height of about 6′ and, so far as it has been excavated, appears to be a shrine somewhat similar to No. 44.

EASTERN AREA.

Finally we come to the higher plateau on the east, the summit of which is crowned by the Temple and Monastery No. 45. This Temple dates from the 10th or 11th century of our era, and it is therefore one of the latest buildings on the site. Two or three centuries before this, however, another shrine had been erected on the same spot with an open quadrangle in front, containing several shrines and surrounded by ranges of cells for the monks. These earlier remains are at a lower level than the later, and in the photographs on Plate XXII are distinguishable from them; but the plan, which is reproduced on the preceding plate, requires a few words of explanation. To the later period belong the shrine on the east side of the quadrangle together with the platform in front of it and the cells and verandahs flanking it on the north and south; to the earlier age belong the ranges of cells on the north, south and west sides of the quadrangle, the plinths of the three detached stūpas in the courtyard, and the low stone kerb which served to demarcate the edge of the verandah in front of the cells. Temple 45.

The cells are built of dry stone masonry of the small neat variety in vogue at the period, the foundations being carried down 9′ and more to the bed rock. Access to the corner cells was provided not, as was often the case, through the cell adjoining—but by an open passage between the two cells; and another open passage also led from the entrance into the quadrangle. The verandah in front of the cells was a little over 8′ broad, raised about 8″ above the rest of the court and separated from it by a stone kerb. This kerb is divided at regular intervals by square blocks which acted as bases for the pillars of the verandah. A specimen of the latter, re-erected in its original position at the south-east corner of the quadrangle, appears on Plate XXII *a*. It is 6′ 9″ in height, with its corners partly chamfered to the form of an octagon—the squared faces being intended for ornamental carving. The stone pavement of this earlier court, which is about 2′ 6″ below the pavement of the later court, consists of heavy stone slabs of irregular shapes and varying sizes. Of the three small stūpas which stood on it, two had apparently perished down to their plinths before the later building was started; the third looks as if it had been intentionally dismantled in part, in order to make way for the pavement of the later temple. It is now standing to a height of 2′ 1″ and is of the

familiar cruciform type with niches in the face of each of the four projections, in which no doubt statues were aforetime placed. The remains of the early temple itself, as well as of the cells adjoining it on the eastern side of the court, are completely buried beneath the later structures. The latter it is, of course, out of the question to dismantle, but fortunately I was able to expose parts of the platform in front of the early temple by under-cutting the débris beneath the corresponding platform of the later edifice. From these it appears that the earlier platform, though slightly smaller than the later one, was designed on much the same lines,[1] and it may safely be inferred also that the plan of the sanctum itself was also generally similar.

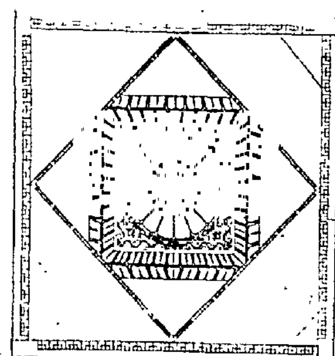
Like so many other buildings on the site, this earlier temple appears to have been burnt down and left for a long space of time in a ruined condition. This is evident from the quantities of charred remains that I found on the floor of the courtyard and the accumulation of earth that had formed above them. It might have been expected that, when the Buddhists set about rebuilding it, their first step would have been to clear away all this débris and utilise as far as possible the old materials; but, whether from religious or other motives, they preferred to level up the remains, lay a new pavement about 2′ 6″ above the old one, and completely rebuild the shrine and cells adjoining it on the east side of the court. At the same time they repaired and renovated the cells on the other three sides of the quadrangle, raised their walls and roofs between five and six feet, and constructed a verandah of the same altitude in front of them, which was then elevated about 3′ above the new courtyard.

The design of this later temple will be clear from Plates XXI and XXII. It consists of a square sanctum approached through a small ante-chamber and crowned by a hollow spire or *śikhara*, the upper part of which has fallen. The temple stands at the back of a raised terrace ascended by steps from the west, and round three sides of it runs a procession path enclosed by a high wall. Like most of the temples of this date, it is constructed of massive blocks well dressed on their outer faces, but otherwise very rough and loosely fitting together. Much of the material of which it is composed was taken no doubt from the earlier edifice on the same spot as well as from other structures, but the majority of the decorative carvings are in the later mediæval style and were manifestly executed expressly for this temple. Such are the sculptured threshold door-jambs, the ceiling of the sanctum, the statues in the niches in the outside walls, and the ornamental work on the *śikhara* and round the face of the terrace. To an earlier age, on the other hand, belong the corner pilasters and perhaps also the cult statue in the sanctum. The interior of the sanctum is all but square in plan, measuring 11′ from east to west by 11′ 5″ from north to south and 16′ 8″ in height. At each corner is a square pilaster, the upper half of which is richly decorated on both faces with the pot and foliage design set over a *kīrttimukha* head and surmounted by a band of floral ornament with a border of palmettes above (Plate XXI *d*). The capitals are moulded and fluted and provided with a narrow necking adorned with a conventional garland design. Above them are Hindu corbel brackets of a simple pattern. The style of the carving on the pilasters, which is strikingly like some of the earlier carvings at the temple at Bāro in Gwalior State, proclaims them to be work of the 8th or possibly 9th century

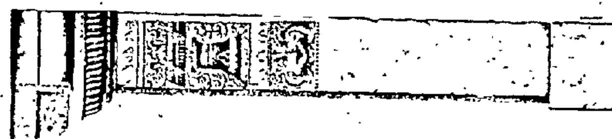
[1] The base of the earlier plinth is adorned with a simple *cyma reversa* moulding relieved with the "lotus and dart" pattern.

EXCAVATIONS AT SANCHI.

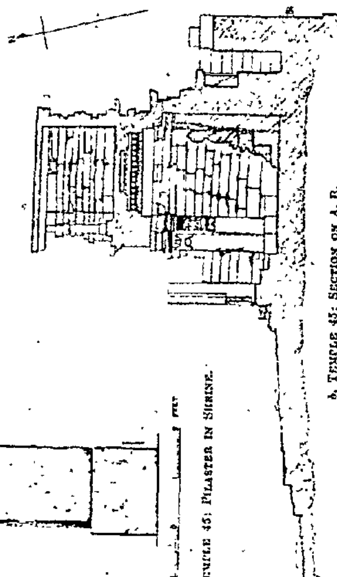
a, TEMPLE AND MONASTERY 45 PLAN



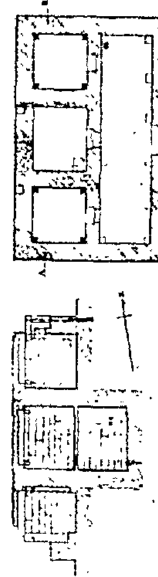
c, TEMPLE 45: CEILING.



d, TEMPLE 45: PILASTER IN SHRINE.



b, TEMPLE 45: SECTION ON A. B.



e, TEMPLE 33: SECTION AND PLAN.

A.D., and it is evident therefore that they were not originally designed for this temple. This conclusion is also borne out by the rough drafts at their inner edges, which prove that in their original position they must have been partly engaged in the wall masonry. The ceiling of the sanctum is constructed on the usual principle of diminishing squares (Plate XXI *c*), and is carried on architraves resting on the Hindu brackets above the pilasters, and further supported by corresponding brackets in the middle of each wall. Of these brackets it is noticeable that the one in the back wall has been left in an unfinished state, and it is also noticeable that the architrave above it has been partly cut away for a space of about 2′, apparently to make room for some object in front of it. That this object was the halo of a cult image of the Buddha may reasonably be inferred, though whether it was the image which is now in the shrine and which may once have been elevated on a higher plinth, or whether it was a taller image, for which the present one has since been substituted, is open to question. Clearly the existing image does not fit and was not designed for the plinth on which it rests, nor could it have been intended that the wall behind and the decorative pilasters should be half hidden by the masonry which it has been found necessary to insert for the support of this statue (Plate XXIII *b*); but this image is shown by its stylistic character to be older than the shrine, and it may have been, therefore, that it was originally raised 3′ or 4′ higher by interposing an extra base above the plinth moulding and that it was afterwards lowered to a more effective position. As it now stands, it measures 10′ ½″ from the bottom of the pedestal and is composed of a fine grained reddish-brown sandstone with half-polished surface, of the variety commonly employed for sculptures of the later mediæval epoch. The Buddha is seated in the *bhūmisparśa mudrā* on a lotus throne, with a second lion throne beneath. Across the lower row of lotus leaves is inscribed the Buddhist creed in letters of about the 10th century A.D. and, therefore, of a later date than the statue itself. On a projection in the centre of the lion throne are two much mutilated figures, one lying prostrate on its back, the other standing apparently in an attitude of victory over it. Similar figures are found in front of the throne of a Buddha statue in Cave 11 at Ellora, which dates from the 7th century A.D. I suggest that they are symbolical of the victory which Buddha won beneath the Bodhi tree over the armies of Māra.

Unlike the pilasters of the sanctum the two pilasters of the ante-chamber are roughly decorated with unfinished designs, one of which (on the north side) was cut through when the pilaster was adapted to its present position, and accordingly it may be inferred that the building from which they were taken had never been finished. The sculptures on the entrance doorway are strikingly rich and elaborate. Projecting from the middle of the threshold is a branching lotus with birds seated on the flowers, and on each side of it a half *kīrttimukha* head; then come little figures holding vases, conventionalised lions, and in each corner a seated corpulent figure of Kuvera (?). Much of the left jamb as well as the lintel above has fallen but the right jamb is almost intact. On the outer band is a stylised female figure standing beneath a tree with a flowing arabesque above. Framed within this border are four vertical bands with a group of four figures at their base. Of these the principle one is Yamunā with her vehicle, the tortoise, at her feet. Behind her is a female attendant holding a parasol above her head, and between these two is a smaller figure, perhaps of a child, while a still smaller figure sits in the corner

of the slab near Yamunā's right foot. Above Yamunā's head is the bust of a Nāga, and above her attendant's head a lotus supporting a tiny figure of the Buddha in the *bhūmisparśa mudrā*. Of the vertical bands above, the innermost is covered with a scroll device, the next, which is supported by a *kīchaka* or demon dwarf, with leogryphs and riders, standing on elephants; the third, also supported by a *kīchaka*, is divided into three panels, each containing a male and two female figures; the fourth is in the form of an ornamental pilaster. The decoration of the left jamb, so far as it is preserved, is an exact counterpart of the right one with the single difference that Gaṅgā, with her vehicle the crocodile, is substituted for Yamunā.

The plainness of the exterior walls is relieved only by three niches—sunk in the middle of their southern, eastern and northern faces. In the southern one of these niches is the image of a god[1] seated on a lotus throne holding a lotus stalk in his left hand with his *vāhana*, the peacock, beneath and a female attendant to either side. In the eastern niche is an image of Buddha seated in the *dhyāna-mudrā* on a lotus throne supported by two lions and accompanied on either side by an attendant, who holds a lotus stalk in the left hand and a fly-whisk in the right. The other niche on the north is empty. Carved on some of the stone blocks of the temple walls are several names (perhaps of the masons who cut them), some of which are now upside down, thus proving that the writing, which is in characters of the 10th century, was engraved on them before the building was constructed.

The spire or *śikhara*, with which this temple was roofed, appears to have been of the usual curvilinear type which distinguishes the Hindu temple architecture of the northern style. Its summit was crowned with a massive *āmalaka* and *kalaśa* of the usual form, many dismembered fragments of which were lying immediately to the north-west of the temple; and from the multitude of other members which I discovered in the débris it is clear that the exterior was relieved on its four faces by repetitions of the same amalaka motif alternating with stylised chaitya designs, but out of the confused mass of fragments it is impossible to restore the original elevation with any degree of certainty. All of the *śikhara* that is still actually standing is a hollow chamber immediately above the roof of the sanctum, and the vestiges of a small porch in front of it, which extended partly over the roof of the ante-chamber. No permanent access to this chamber was provided either inside or outside the temple, and it might appear therefore that both chamber and porch were devoid of purpose. As a fact, however, the chamber serves a distinct purpose, in that it lightens the body of the spire, and the porch also is useful by reason of its decorative effect.

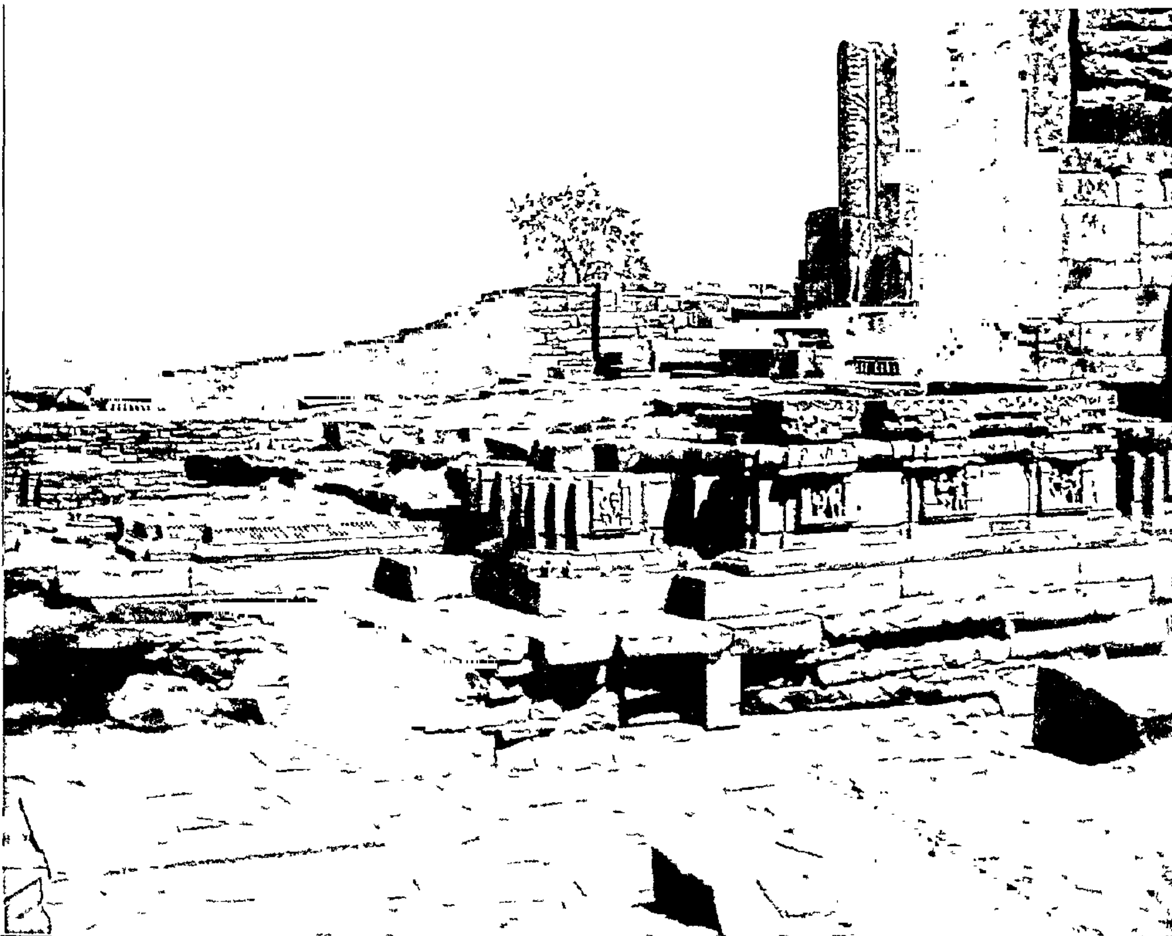
In the outer wall which surrounds the *pradakshiṇāpatha* are two windows of pleasing proportion, provided with heavy pierced stone screens, which are more than 2′ 6″ thick and of the usual cross batten type. Both the outer and the inner faces of these screens are decorated with rosettes and floral medallions and enclosed in a frame of conventional lotus leaves.

The raised platform in front of the temple was paved with architectural members taken from several earlier structures, among which were a number of broken pillars and cross rails belonging to Stūpa 3. These pave-stones were clamped together with iron clamps as indicated in the plan on Plate XXI *a*. The vertical faces of the platform

[1] Perhaps "Mayūra-vidyārāja."



a. TEMPLE 45, FROM WEST



b PLINTH OF TEMPLE 45, FROM SOUTH

are adorned with niches and further relieved by salients and recesses as well as by deep horizontal mouldings, which produce an effect of light and shade almost as indeterminate as it is in Chalukyan architecture. In the niches are one or more figures—sometimes erotic—in the stiff conventional style of the period. Equally conventional are the decorative devices, simulating roofs, over the niches, and the lotus and other floral designs on the horizontal mouldings.

To the north and south of the temple are two wings each containing three cells with a verandah in front. The door jambs of the two cells nearest the temple are enriched with carvings closely resembling those on the doorway of the temple itself, and like the jambs of the latter are spanned by lintels of a later and totally different style, the fact being that the building both of the temple and of the wings must have been suddenly interrupted, for what reason is not known, and not resumed again until probably the 13th century.

In constructing the verandah of these wings some of the pillars belonging to the earlier monastery on the same site were employed, and it is interesting to observe that the carvings on one of these pillars had also been left unfinished and subsequently cut away at the top, in order to adapt the pillar to its new position. These carvings consist of a pot and foliage base and capital and three *kīrttimukha* heads on the square band between, and they are in the same style as those on the pilasters in the corners of the sanctum, which were also, no doubt, taken from the earlier monastery located on this site.

Monastery 44.

South of the temple described above is the structure numbered **44**, which was erected probably in the 8th or 9th century A.D. and which appears from the disposition of its foundations to have been a small monastery of a somewhat unusual type. The eastern wall, unfortunately, is buried beneath the circuit wall of the enclave, but my excavations have left no doubt as to the plan. It consists of an ante-chamber covering the whole width of the building and of a rectangular hall behind it containing the remnants of a pavement with what appears to have been a stūpa in its centre. On either side of the hall were foundations which seemed to indicate that a row of small chambers had been built above them; but such chambers are manifestly too small for the habitations of monks, and, if the foundations correctly represent the plan of the superstructure, I can only advance the suggestion that the cells were intended for the reception of images as in some of the Gandhāra chapels, and in many temples of the Jains. The building stands on a stone plinth, 4′ high and ascended by a flight of steps in the middle of its western side. Its walls are constructed of rough rubble faced on both sides with well cut ashlar and provided on the outside with footings which start immediately above the plinth referred to. These footings are similar to those already observed in the stūpas of the same age.

Monasteries 46 and 47.

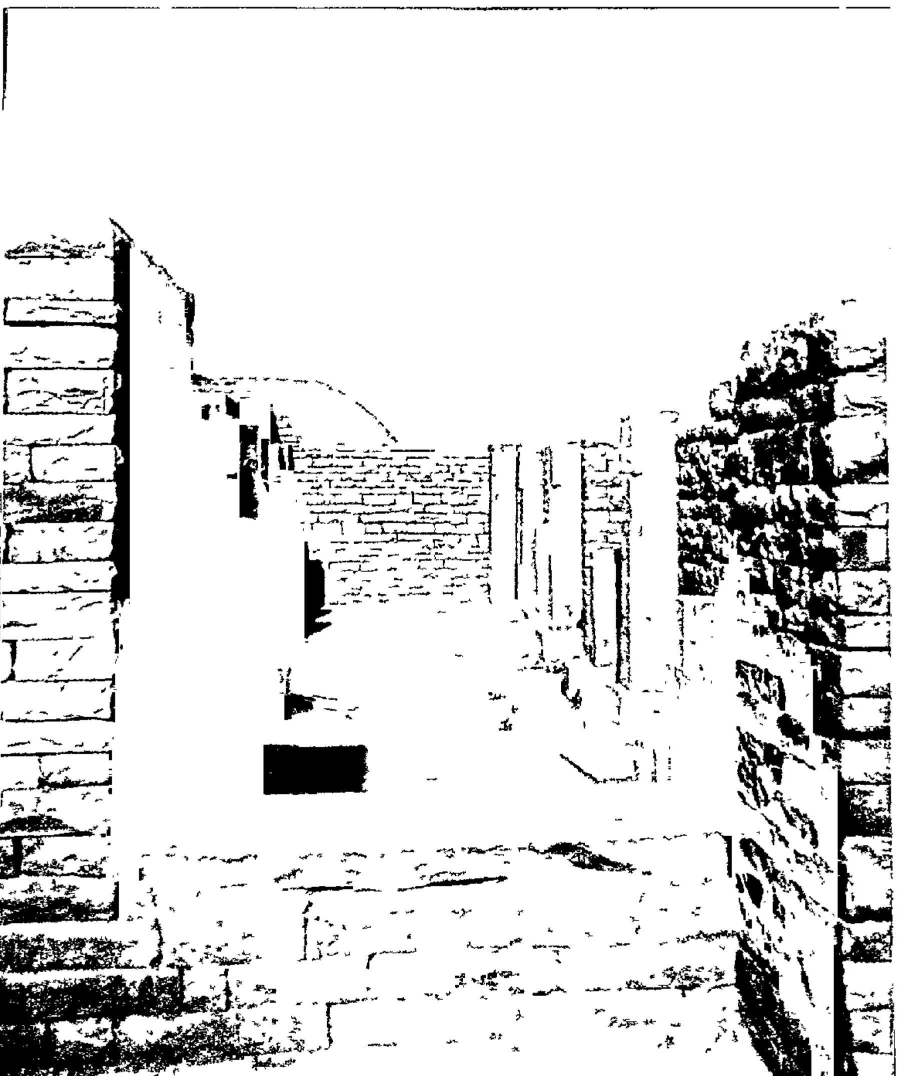
Another monastery on a more elaborate plan abuts on to the northern and western sides of the court in front of Temple **45**. This monastery was not erected until after Temple **45** had been rebuilt, and can hardly be assigned to an earlier date than the 12th century A. D. As will be seen from the plan, it comprises two courts numbered respectively **46** and **47**, the larger of which, including the verandahs and chambers ranged around three of its sides, measures 103′ from north to south by 78′ from east to west. On the south side of this court is a pillared verandah, with a small cell and a long narrow chamber at the back; on the west is a closed colonnade and on the north is a

pillared verandah (Plate XXIII *a*) with a shrine containing a small ante-chamber and sanctum at its western end, and behind it a corridor and five cells. In the sanctum of this shrine I found the base of a statue measuring 4′ 9″ long by 2′ 2″ wide and 7″ high. The main entrance to this court is at the northern end of the eastern colonnade, and a second doorway leads by two steps from the western end of the northern verandah into the smaller court **46**, which is on a somewhat higher level and, like the larger court, provided also with chambers on three sides. This monastery is still in a relatively good state of preservation, portions of the roof as well as many of the pillars being still preserved *in situ*. For the most part, the walls are built of neat regular masonry, but the construction of the verandah and chambers on the southern side as well as some of the interior walls of the smaller court is noticeably inferior, and it seems probable that these were later additions. The pillars and pilasters in the verandah and cells are roughly dressed and relieved only by partial chamfering of the edges. They are set on simple squared bases and surmounted by capitals of the common Hindu bracket type. The roof, which is flat, is composed of thick stone slabs resting on plain solid architraves, and once, no doubt, covered with a thick layer of earth. Throughout the monastery the stone work is coarsely and plainly treated, the only effort towards decorative carving being on the bracket capitals, the faces of which are relieved with simple roll mouldings, and on the jambs of the doorway leading into the corridor on the northern side, which are adorned with a lotus leaf border. Probably both pillars and walls were intended to be covered with plaster, but no trace of the plaster has survived, and it is unlikely therefore that the intention was ever carried into effect.

The quadrangles of both the larger and smaller courts were paved with massive stone slabs between 4″ and 8″ in thickness and considerably heavier, therefore, than those employed in and around the earliest stūpas and in Temple **40**. Beneath the pavement in the larger court I found numerous architectural members of an earlier age, including a column in the Gupta style. Still lower down, at a depth, that is to say, of 3′ 2″ below the pavement, I brought to light a stone floor of an earlier building; then a second *kachchā* floor, 9″ lower; and, again, a third floor of concrete, 2′ 3″ below the second. These floors, belonged, I had no doubt, to earlier monasteries, but inasmuch as the lowest of them was not more ancient than the Gupta times, I did not deem it worthwhile to continue the excavation.

Nos. 49, 50 and 51.

The long boundary wall at the back of the structures **49** and **50**, which abuts on to the north-west corner of the Monastery **47**, appears to be older than the latter, since the western wall of the monastery is built on to it. It stands about 7′ high and is built of somewhat loose masonry. Near its southern end was subsequently erected a small building of which only the raised plinth (No. **49**) survives. Another building also subsequently erected is that numbered **50** on the plan, the construction of which necessitated the demolition of part of the boundary wall. All that now remains of this building consists of some stone pavements, walls and column bases, but these are sufficient to show that it was a monastery and, moreover, that it dates from approximately the same age as Monastery **47**. Included within its precincts and situated apparently in the middle of one of its courts is the small structure **51**. This structure is standing to a height of about 8′ above the ground level and consists of three small rooms with an



a MONASTERY 17 INTERIOR OF NORTH COLONNADE



b TEMPLE 45 STATUE OF BUDDHA IN SHRINE



a. Monastery 47: View of interior during excavation.



b. General view from Temple 45, after excavation and repair.

Photo.-Engraved & printed at the Offices of the Survey of India, Calcutta 1916.

ante-chamber in front and an underground cellar beneath the central room. It is entered by a doorway in the eastern side of the ante-chamber and there is another doorway opposite leading into the central chamber, but the side chambers, curiously enough, are provided only with windows through which anyone wishing to enter would have to crawl. The structure measures 29′ 6″ from north to south by 19′ 10″ from east to west. Like the outer walls and verandahs of the later Temple **45**, it is constructed of large blocks of Nāgaurī stone well dressed on their outer faces ; the roof is composed of thick stone slabs carried on solid architraves which are supported in turn on corbel brackets projecting from the walls. In the central chamber there are six such brackets—four at the corners and two in the side walls—but in the side chambers there are four only at the corners, and these four are supported on pilasters surmounted by square capitals.

The last of the monuments to be described and one of the last to be erected on the site of Sāñchī, is the massive structure **43**, which stands partly on the high ground of the eastern plateau, partly on the lower ground to the south of it. In plan, this structure bears a striking resemblance to the famous stūpa of Kanishka at Peshawar, being cruciform in shape with a round bastion at each of its four corners ; but, in the absence of any remains of a superstructure, it must remain doubtful whether it ever served as the base of a stūpa. As it stands, it is nothing more than an elevated court surrounded by low parapet walls with traces here and there of a few interior walls, which appear to have been later additions and have accordingly been omitted from the plan. The surrounding walls of this court, as well as of the bastions, are rather less than 4′ 6″ in thickness and are constructed of massive blocks of stone of varying sizes, among which are several that have been taken from dismantled buildings of the 11th or 12th century A.D., but, as these particular blocks were built only into the top of the wall, it is possible that they belonged to a relatively late repair. On the south side the wall has, on its exterior face, an altitude of eight to ten feet above the surrounding level, and on this side the foundations descend another four or five feet ; but on the north, where the ground is higher, the foundations are quite shallow and the wall itself has a height of not more than three feet.

Building 43.

In the plan on Plate I there appear, almost in the centre of this edifice, the remains of some cells with a courtyard on their northern side. These remains were exposed in a trench which I sank beneath the floor level of the courtyard and belong to a monastery which was erected on this site probably in the 7th or 8th century B.C. The floor level of this monastery is 12′ below the present level of the court, and its walls, which are built of the ordinary dry stone masonry are standing to a height of between 6 and 7 feet ; so that their tops come within five or six feet of the present surface. Besides this trial excavation in the middle of the courtyard I also sank shafts in the south-western and north-western bastions. Beneath the former I found, as I have already observed, the old stone pavement which was laid around the Great Stūpa in the 1st century B.C. still continuing in an easterly direction. At the base of the latter and at a depth of 14′ from the surface I brought to light a large earthenware jar inverted over a stone slab but whether this jar had any connexion or not with the building of the bastion, I could not discover.

JOHN MARSHALL.

EXCAVATIONS AT AVANTIPURA.

THE ancient town of Avantipura is represented by the present village of Vāntipōr[1] situated on the right bank of the Vitastā (*vulgo* Vyath) river 18 miles above Srinagar. The city was founded by Avantivarman, king of Kashmir from 855 to 883 A.D. on an ancient site called Viśvaikasāra, which must have enjoyed sanctity even before the time of that king. It must have been a large city in ancient times. Vast masses of remains belonging to it can be seen to this day on the sides of the hill near the present town. These remains consist mostly of long stretches of stone walling,[2] which line what would seem to have been streets in ancient times, and rubble foundations of buildings such as we find at the site of Śrīnagarī, the ancient capital of Kashmir, and other ancient places in the valley. Among these remains there are large mounds of débris which at first sight may be mistaken for *stūpas* with their facings stripped off. I opened one small mound of this nature at Purāṇādhishṭhāna (*vulgo* Pāndrēṭhan), but, as it did not yield any relics of any kind, I infer that these mounds must have been terraces of wealthy people's houses or other important structures.

In addition to the remains noticed above there are more than half a dozen religious buildings of ancient date. The two largest of these are of considerable interest as they were founded by the same ruler as the city of Avantipura in honour of Vishṇu and Śiva respectively. The passage in the Rājataraṅgiṇī of Kalhaṇa which supplies this information is verse 45 of Bk. V, which Dr. Stein translates as follows : "Having built there, before his accession to the throne, the [shrine of Viṣṇu] Avantisvāmi, that wise [King] after obtaining sovereign power, erected then the [temple of Śiva] Avantīśvara." General Cunningham on the authority of a local tradition, identified the two temples mentioned in the above verse with the two large temples near the villages of Avantipura and Jaubrāṛa respectively. General Cunningham, however, was wrong in assuming the dedication of both of them to Śiva. Any one who is acquainted with the nomenclature of Kashmir temples need not be told that the terms *īśa* and *īśvara* are only used in the names of Śiva temples and that the use of '*svāmin*' or '*keśava*' is restricted to the names of Vishṇu temples.[3] General Cunningham's.

[1] The reasons for this identification are set forth in Kalhaṇa's *Rājataraṅgiṇī* trans. by Stein, Bk. V, 44-45 n.

[2] Baron Hügel (*Travels*, p. 127) was of opinion that these stone walls supported level terraces for cultivation.

[3] Kalhaṇa's *Rājat.* trans. by Stein, Vol. II, p. 369 n.

main argument in favour of his identification of the larger temple with that of Avantīśvara was that Avantivarman's advancement to the throne placed at his disposal increased means to erect more costly buildings. My excavations prove, and this is a fact which must have been clear even to General Cunningham (as parts of both of these buildings were visible above the ground even in his time), that the smaller temple must indeed have involved much greater expenditure than the other temple, owing to the elaborate carvings with which its imposing colonnades and its gateway are adorned. Consequently this argument of General Cunningham will not hold good, and it is therefore merely a matter of chance that his identification of the two temples turns out to be correct.

In the north-east corner of the colonnade of the smaller temple near the village of Avantipura, General Cunningham unearthed a pedestal, which he believed to be one of a Śiva *liṅga*. Even if this pedestal did actually belong to a Mahādēva image, it is more than doubtful if it actually belonged to this temple. My excavations have revealed scenes depicted on the stairs and other parts of this temple which are undoubtedly Vaishṇava, and there seems not a shadow of a doubt that this is the real Avantisvāmi temple. The only Śaiva images excavated in this temple, that is the imperfect figures of Ardhanarīśvara [1] and Gaṇapati, which are contemporaneous with the temple, must have been transferred from some other temple, not improbably from the temple near Jaubrāṛa. All the other images discovered in this temple are either of Vishṇu or other Vaishṇava deities. The excavation of the other temple, which is situated half a mile to the north-west of Avantipura, near the hamlet of Jaubrāṛa, is not yet complete. The courtyard, which has been mostly dug down to the original floor level, has not yielded any distinctly Śaiva relics yet, but the central shrine has still to be explored and may yield evidence which will finally settle its identity with the Avantīśvara temple.

Dr. Stein notes that Avantipura must have retained its importance long after the death of Avantivarman.[2] In the time of Kalhaṇa the temple of Avantisvāmi was the scene of a siege, when its courtyard, protected by mighty stone walls, afforded shelter to the fugitive officers of Jayasiṁha (1128-1149).[3]

The earliest notice by a European writer, as far as I can discover, is a brief reference by Mr. Forster, who visited Bhyteepur (Avantipura) on the 3rd of May 1783 [4] in the reign of Timūr S͟hāh Durrānī. He says: " In the vicinity of Bhyteepur are seen the remains of an Hindu temple, which, though impaired by the ravages of time and more by the destructive hands of the Mahometans, still bore evident marks of a superior taste and sculpture." This statement can only apply to the Avantisvāmi temple, as there are no carvings on the gateway of the other temple, which alone was visible above the surface at that time. Mr. Forster travelled to Srinagar from Islāmābād by water, and, whereas the Avantisvāmi temple is quite close to the bank of the river, the other temple is some distance away and travellers seldom come out of their boats to see it.

[1] See below page 53, Pl. XXVIII *a* & *f*.
[2] *Rājat.* trans. by Stein, Vol. II, p. 460.
[3] *Ibid.* VIII, vv. 1429 & 1474.
[4] *Journey from Bengal to England*, Vol. II, p. 9.

Mr. Moorcroft[1] visited Avantipura in 1823, on his way from Srinagar to Vernag. As he travelled by road, he passed the larger temple, *i.e.*, the temple of Avantīśvara, first. The road then ran between the ridge and the temple, as he passed the temple on his right. He describes the central shrine as a " confused mass of stones," but rightly states that it " must have been a square temple with four doors approached by broad and spacious porches and enclosed by a wall." He is wrong, however, in giving the enclosure wall " four gates opposite to the doors of the central structure," as there never have been more than one gateway. About the temple at Avantipura, *i.e.*, the Avantisvāmi temple, he makes the same mistake, for he assumes that the quadrangle surrounding this temple was also provided with four gateways. Mr. Moorcroft was of opinion that " earthquakes must have been the chief agents " in the destruction of the temples of Kashmir.

Mr. Vigne, who was in Kashmir[2] about the year 1837, has very little to add to our knowledge of these temples. So completely was the quadrangle round the Avantisvāmi temple buried under the earth, that what stonework did appear above the surface was readily mistaken by Mr. Vigne for " the base of the colonnade." In connection with the desertion of the town of Avantipura Mr. Vigne's remarks deserve to be reproduced here. He says : " the want of regular irrigation must always have been troublesome, but I should think that the town began to be deserted when the temples were destroyed by Butshekan, or when the ground on which Srinagar stands was first made habitable by draining." We note that the foundation of the new capital of Kashmir had nothing to do with the desertion of the ancient city of Avantipura, as that event took place many centuries before Sikandar But-s̲h̲ikan. Baron Hügel,[3] who travelled in Kashmir in 1835, describes these temples as " two falling Buddhist temples . . . . the first called Vencádati Devi . . . . . the smaller one, called Ventimádati." The legends he quotes regarding the founder of the city and these temples do not deserve any notice.

The most accurate and perfect accounts of the Kashmir temples that have yet been written we owe to that great *savant* General Sir Alexander Cunningham, whose " Essay on the Arian Order of Architecture " in the J.A.S.B. for 1848 is full of useful information about the antiquities of Kashmir. In connection with the temples of Avantipura, General Cunningham has left us ground plans of both temples as far as their outlines could be ascertained at his visit. The only remains then visible above the surface consisted of the superstructure of the gateways, mere lines of stonework to mark the colonnades and heaps of stones in place of the central shrines. These plans are, therefore, naturally conjectural and defective in many respects. A comparison of these with the drawings which accompany this article will show the shortcomings of the former. General Cunningham excavated a small portion of the peristyle, about 20 feet in length in the north-east corner of the quadrangle of the Avantisvāmi temple, and as he found the carvings on the trefoiled recesses which he unearthed quite uninjured, he concluded that the silting of the temple must have taken place before the time of Sikandar But-s̲h̲ikan. He says : " The final and complete silting up of the quadrangle

[1] *Travels*, Vol. II, p. 243 sq.
[2] *Travels in Kashmir* Vol. II, p. 25
[3] Travels, 1845, p. 127 & 141.

whether by the gradual process of years or some sudden catastrophe, had fortunately been the means of preserving the greater part of this peristyle from the defacing fingers of time as well as from the destroying hand of Mahomedan bigotry ; perhaps at some future day to be unveiled by European archæologists in all its virgin beauty." The subjoined account of my excavations at this temple will show to what great extent General Cunningham's remarks have proved true ; for there is no doubt that the courtyard had filled up with silt for more than two-thirds of the height of the colonnade already before the time of Sikandar, and it has been most gratifying to me to find the lower parts of the colonnades as well as the delicate carvings upon them in all the " virgin beauty " predicted for them by General Cunningham.

Mr. Cole's description of the Avantipura temples is mostly a repetition of General Cunningham's opinions, but we are indebted to him for the valuable photographs he has left us of these remains as they existed in the year 1868.[1]

AVANTISVAMI TEMPLE.

The above paragraphs will show the state of oblivion into which this important monument had fallen[2] when the excavations described in this article were taken in hand. In 1903, Dr. Vogel visited the remains of this temple and proposed valuable measures of conservation to the gateway, but it was Sir John Marshall who in 1907 drew the attention of the Darbar to the desirability of excavating " the place thoroughly at the earliest opportunity, as it seems certain that most, if not all, of the peristyle can be recovered as well as those portions of the plinth of the temple itself and its entrance porch, which are now buried." Sir John Marshall estimated the cost of the excavations to be roughly 5,000 rupees, which is very near the actual expenditure incurred. Sir John Marshall's recommendations were readily accepted by the Darbar, and the excavation of the temple was taken in hand by Mr. Chatterji in 1910 (Samvat year 1967). Mr. Chatterji exposed the greater part of the peristyle and he also excavated part of the courtyard, but his excavations terminated at a level between six and seven feet below the present ground level, *i.e.*, quite eight feet above the floor of the courtyard. Consequently the whole of the edifice beneath this level, the floor of the courtyard with the shrines in the corners, the several stairs, the central shrine and the basement of the peristyle all remained unexcavated. In the way of portable antiquities Mr. Chatterji's excavations brought to light a few copper coins, a few fragmentary images and fragments of charred birch-bark manuscripts of a comparatively late date. The excavations remained in abeyance until they were resumed under my supervision in the autumn of 1913, and it was only by continuing the diggings through the last summer and the greater part of the present, that the excavation has been completed. The work was rendered extremely laborious and difficult by the presence of huge quantities of rough boulders with which the courtyard had been filled up. These boulders had no place in the construction of any part of the original temple, which is composed entirely of well-cut and squared stones, but some of them

[1] *Illustrations* of *ancient buildings in Kashmir*, pp. 25-26 and accompanying plates.

[2] Mr. Cole has left us a nice photograph of the temple as it existed in his time, *vide Illustrations of ancient buildings in Kashmir*, 1869, Pl. 20, 68.

had been employed in later additions to and renewals of parts of the edifice for diverse purposes. We shall have to refer to this later on.

The excavation of the central shrine was a task of exceptional difficulty. This structure had suffered most, and what remained of it was a confused mass of stones. It was expected that, when the excavation was finished, it might be possible to reconstruct some part of the central shrine, and, accordingly, before the excavation began, each block on each side was carefully numbered, and photographs were taken of each side of the shrine, so that there might be no difficulty afterwards in identifying the different stones. The blocks were then gradually rolled down to the floor of the courtyard, where they have been stacked neatly. The excavations reveal the fact that the central shrine had been completely destroyed and its material mostly carried away to the Capital and used up in the construction of modern houses. I found several architectural stones lying on the bank of the river and had them shifted to the temple.

The only parts of the central shrine which have remained undisturbed, are three corners, the fourth or south-east corner having altogether disappeared. The greatest extant height of the walls occurs on the north side (Plate XXVI, *c*) where it is standing to a height of 11′10″ above the top of the plinth. This part of the wall is the left pedimental pilaster of the niche on the north side.

The central shrine (Plate XXVI, *d*) measures about 33′ square externally. The entrance was in the west wall, the remaining three sides being relieved with niches of the same dimensions as the doorway in the west side. It will be noted that this is exactly the plan of the central shrine of the Buniār temple and the temple near Uri, commonly known as the Ḍhaṭhā Mandir or the dilapidated temple. The pilasters, which carried the pediments on each side, project about 9″ from the face of the wall. Of the entrance on the west side only one stone of the left hand jamb is now visible above the plinth. The pilaster flanking it has a trefoiled niche, which must have contained a divine figure now cut away. Several stones of the pediments on the remaining three sides have been rescued from the débris. They are carved in the usual fashion. The spandrils were adorned with well-executed figures of Garuḍa, the vehicle of Vishṇu. The same motive occurs on the walls of the entrance porch, and upon the caps of the pilasters which flank the cells of the peristyle. A block of stone sloped on two consecutive sides, which came to light in the fallen débris of the central shrine, is interesting, inasmuch as it affords useful evidence in regard to the form of the roof of the shrine, which must have been gabled like that of the Pāndrēṭhan and Pāyar temples. General Cunningham advanced the theory that the temples of Kashmir had wooden roofs, but none of the temples of Kashmir whose roofs have survived favour his view.

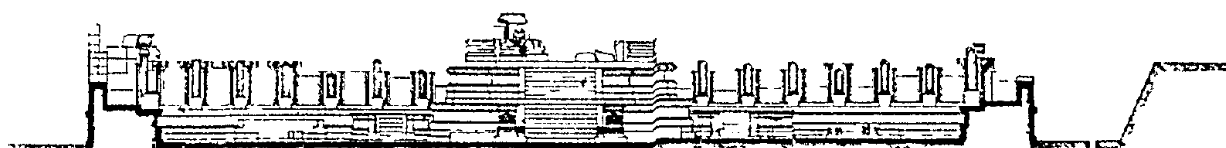
Nothing has been found of the principal image which was worshipped in the central shrine, except two fragments of its pedestal,[1] which came to light in the eastern portion of the courtyard. The mortice which held the tenon of the image is 1′5″ broad, 1′1″ wide and 1′ deep. The general character and form of the principal image

[1] The pedestal (*pīṭha* or *bhadrapīṭha*) is an essential accessory of the image, and the construction of pedestals of images was considered in Kashmir almost as meritorious as the consecration of divine images. These pedestals are provided with a conduit (*snāna-drōṇi*) for carrying away water with which images are bathed daily. The conduits were generally carved with a figure of the vehicle (*vāhana*) of the deity and were often made of silver (*cf.* Kalhaṇa, *Rājat.* edited by Stein, II, v. 46).

EXCAVATIONS AT AVANTIPURA, KASHMIR.

Turret
Turret
SHRINE OF GANGĀ
SHRINE OF VISHNU
BASE OF GARUDA STANDARD
SHRINE OF VISHNU
B

a, THE TEMPLE OF AVANTISVAMI: PLAN.

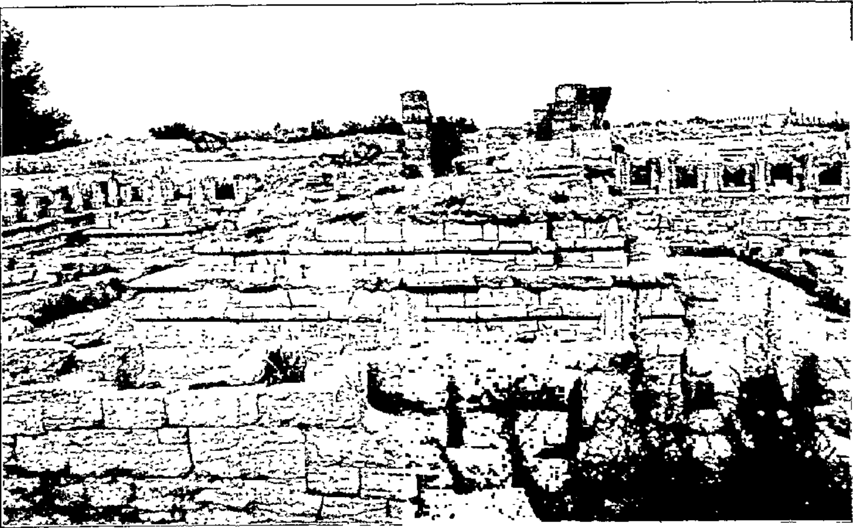


b, THE SAME: SECTION.

EXCAVATIONS AT AVANTIPURA: THE AVANTISVAMI TEMPLE.



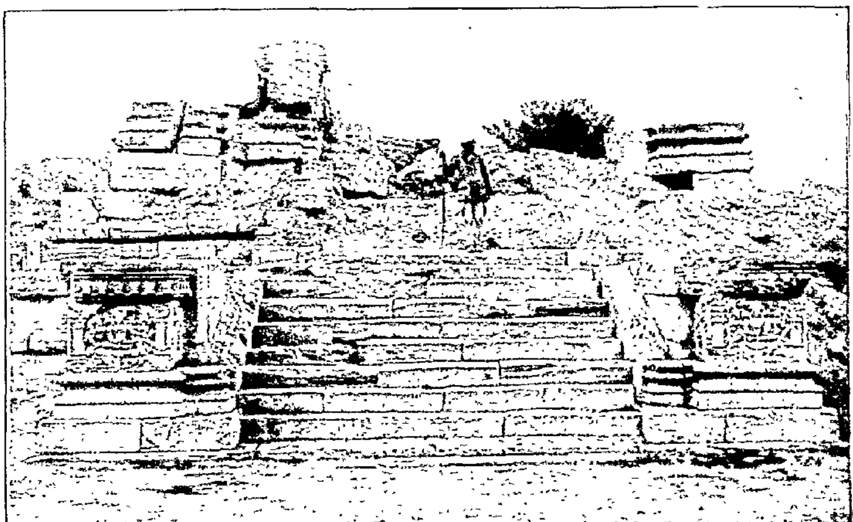
a. VIEW FROM EAST BEFORE EXCAVATION.



b. VIEW FROM EAST AFTER EXCAVATION.



c. NORTH FACE OF CENTRAL SHRINE.



d. APPROACH TO CENTRAL SHRINE.

Photo-Engraved & printed at the Offices of the Survey of India, Calcutta,

can, however, be guessed from several replicas of it, which must have been placed in the cells of the peristyle and in other parts of the building. One (ht. 3′ 6¾″) of these statues (Plate XXVIII, *b*-c) which is the best preserved of all was found on the floor of the courtyard not far from the central shrine in the north-west corner of the courtyard. Its pedestal was found quite close to it. The image is carved in the round and is, like all the Vishṇu images so far noticed in Kashmir, four-faced, the proper right face being one of a lion and the left of a boar, no doubt in allusion to the lion and boar incarnations of the deity. The central head has a three-peaked coronet studded with diamonds and rosettes of pearls. There is a prominent circular dot between the eye-brows to indicate the *tilaka*. We notice large circular ear-ornaments, a torque, a long garland, jewelled armlets and other ornaments. A lozenge-shaped diamond on the chest represents the *śrīvatsa*. The only garment worn is a *dhōtī* secured at the upper end with a belt. There is a short sword at his right side, and between his feet is the upper part of the goddess *Pṛithvī*, represented as rising from the earth, much in the same style as in the representations of the temptation of Gautama Buddha by the Evil One. The earth goddess (Bhū-dēvī) is sometimes depicted in Vishṇu images as his second consort, owing presumably to her association with the god in his Boar-incarnation, when the latter uplifted her from the depths of the lower regions. Vishṇu has four arms, the upper right and left hands holding a fully expanded lotus flower with a short stalk (*sanāla-kamala*) and a conch respectively. The lower hands rest on the heads of two chauri-bearers, of whom the one on the proper right of the deity is a female, while that on the other side is a male. A point in connection with this class of statues which cannot yet be explained, is the presence of a demoniacal head carved on the back of the statue, as if it were a fourth head of the deity. As is customary with these figures, the demon in question has grinning teeth, protruding tushes and eyes, a short chin and terrific eye-brows. His hair is tied up in a big knot. We notice a large number of holes cut into the image, which must have been meant for adorning the statue with sticks of flowers or *dhūpa* on festive occasions. The pedestal (2′9″ by 1′7″ by 1′4″) is furnished with a spout which carried off the washings of the image. The statue fully illustrates the excellence of workmanship of which the Kashmiri sculptors of the 9th century were capable.

In many respects the statue described in the preceding paragraph resembles two Vishṇu images, one from Saho [1] in Chamba State and the other in Lahul,[2] both of the pre-Muhammadan period, though somewhat later than the Avantipura image. In connection with the Saho image, Dr. Vogel was informed that the female figure between the feet of Vishṇu was Lakshmī. It is more probably Bhūmi-dēvī. In both the Lahul and Saho images, the upper hands of the god rest on the head of two chauri-bearers, a male and a female—both evidently human attendants. As I have not got back views of the Saho and Lahul images, I am unable to ascertain if they have the fourth demoniacal head on the reverse.

This three or four-faced type of Vishṇu image seems to be peculiar to the hills of the Punjab. The common type of the plains of India, which obtained in the mediæval period, is best illustrated in an image preserved in the Museum of Archæology at

[1] Vogel, *Antiquities of Chamba State*, p. 248, and Pl. XXXIX, a.
[2] This image has not yet been published.

Mathurā.[1] Here Vishṇu has only one face and his attendants are Śri, holding a lotus to right, and Sarasvatī holding a lute (*vīṇā*) to left. Instead of the half-bodied Earth-goddess we notice a figure of Garuḍa on the front of his seat.

The plinth on which the central shrine stands is in a very good state of preservation and similar in design to that of the temple of Buniār and the temple above Uri. It consists of two platforms placed one above the other. The lower platform measures 47′10″, the upper 38′10″. They are designed in the usual fashion.

The entrance of the shrine was gained by a flight of steps with well-built flank walls, which have been found in an admirable condition. The stair (Plate XXVI, *d*) projects 19′6″ from the face of the plinth, the mouldings on the latter being continued on it. The steps are composed of the same kind of stone as the temple, and are so carefully smoothed that at first sight they appear to be made of black marble. The Mughal pavilion in the innermost garden of the Shalamar at Srinagar is made of the same material, but has been given a better polish. At the front of each of the flank walls we observe an interesting panel crowned with a cap, with elegant carvings consisting of lions' heads alternating with geese or flower plants and square lotus rosettes above. The subject of the scene on the left wall (Plate XXVII, *d*) is a six-armed image of Vishṇu seated in easy posture on a bench with curved legs, covered with an ornamental cloth edged with a row of bells or tassels. To his right and left are Satyavāmā and Śrī. The emblems in the right hands of Vishṇu are a mace (*gadā*), a garland and an ear of corn (*mañjarī*). The uppermost left hand has a bow (*pināka*), and the lowermost a lotus[2] bud. The middle left hand rests on the left breast of the goddess on that side. In front of the seat on which Vishṇu sits are three birds, apparently parrots. The *tilaka* on the forehead of the central figure is a circular dot. Those on the foreheads of the goddesses are dots enclosed in crescents. The panel is enclosed in square pilasters of quasi-Greek type, surmounted with a multifoil arch with a goose in each spandril. The subject (Plate XXVII, *e*) depicted on the front of the other flank wall is identical, except that the figure of Vishṇu is four-armed and his forehead-mark is similar to that of the goddesses. It is interesting to note that similar scenes also occur on a Vishṇu temple built by Lalitāditya at Andarkot, which was noticed by Dr. Bühler and the entrance porch of which has been exposed by myself. The subject carved on the inner side of the right flank wall (Plate XXVII, *c*) of the stair is also quite clear. The central figure presumably represents the youthful Kṛishṇa standing facing with a flower bud in each hand. To his right and left are archangels bringing presents of sweets and garlands in the upper corners. To the proper right of Kṛishṇa we notice a pair of figures, the lower one being a female (cowherdess), who is feeding a cow from a bowl. The other figures on this side and the four figures on the other side may be cowherd boys (*gōpa*). The sculpture corresponding to this on the opposite wall (Plate XXVII, *a*) is doubtful. The composition represents a two-armed bearded figure standing in the middle with archangels to his right and left in the upper corners. The central figure holds a rosary in the left hand. It is not impossible that it is Brahmā. To the proper right of Brahmā below the two archangels are four figures, the upper two of which might be

[1] Vogel, *Catalogue of the Arch. Museum at Mathura*, No. D. 35, Pl. XVIII.

[2] Some of these emblems are the same as those enumerated in the following half verse from *Vṛihat-stōtraratnākara* Bombay (p. 38). दरारिचर्मासिगदेषुचापपाशान्दधानोऽष्टगुणोऽष्टबाहुः as the emblems of the eight-armed Nārāyaṇa.

the donors, possibly Avantivarman the king and his queen with joined hands. The royal character of the king is brought out by a turban which is not noticed in the other male figures. The female figure behind the queen must be her attendant, as she carries a garland for her, while the male figure lower down is a common votary, like those on the proper left side of the deity.

The courtyard, which is paved throughout in stone slabs, measures 174 feet east to west by 148′ 8″ north to south. The outer dimensions of the surrounding peristyle are 204 feet by 173 feet respectively. Rainwater from the courtyard was carried off through a stone built drain about a foot wide which begins to the south of the gateway and runs out under the wall between cells Nos. 66 and 67 and joins the bigger drain outside.

At a distance of 21 feet to the west of the stair to the central sanctuary is a moulded base, 3′10″ square, which must have supported a column crowned with a Garuḍa. The column and the Garuḍa have not been recovered. I have unearthed bases of similar columns in other temples, and the *Rājataraṅgiṇī* records that the Gōvardhanadhara temple at Parihāsapura had a large Garuḍa-dhvaja. Mr. Vigne imagined that the fragmentary Mahādēva image (*J.A.S.B.*, 1848, Plate VII) at Pāndrēṭhan represented a part of the Parihāsapura Garuḍa standard.

A noteworthy feature of the temple are four shrines, one in each corner of the quadrangle. They are all equal in size, 16′6″ square, and consist of a square plinth moulded like that of central shrine, and must have been built at the same time as the sanctuary. They all face towards the west and their superstructures have disappeared. Between the shrines in the eastern corners of the quadrangle are two smaller shrines, which must be somewhat later in date. Each one of them has a reservoir outside it to receive the water with which the image was daily washed. The images that were originally placed in these shrines were all destroyed except one.[1] Fragments of others have been found and will be noticed later on.[2] The image that escaped destruction belonged to the shrine in the north-west corner of the quadrangle. The pedestal of the image which was worshipped in the shrine in the south-west corner measures 2′7½″ by 1′10½″ by 1′6½″. The spout has a well-cut Garuḍa head. The pedestal belonging to the bigger shrine in the south-east corner is 2′6″ by 1′10″ by 1′5″. The base of the statue which has remained in the top bears three pairs of feet, the middle pair of which, with the imperfect bust of the earth-goddess, belonged to a statue of Vishṇu cut in the round, and the others to the attendant figures. The pedestal found near the bigger shrine in the north-east corner measures 2′3″ by 1′7″ by 1′4″. On the spout of this we notice a crocodile (*makara*) head with a string of beads suspended from its snout. No fragments of the image which stood on this pedestal have come to light. But, if we remember that the crocodile is the vehicle of the river goddess Ganges, we might assume that this shrine was dedicated to that goddess. Images of the river goddesses are carved on the entrance of the gateway to the colonnade of this temple, on the portico of the temple of the sun or Mārtāṇḍa and other temples. Perhaps the goddesses were sometimes also given separate shrines in the compounds of the bigger temples.

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[1] See page 45 above

[2] See list of sculptures below.

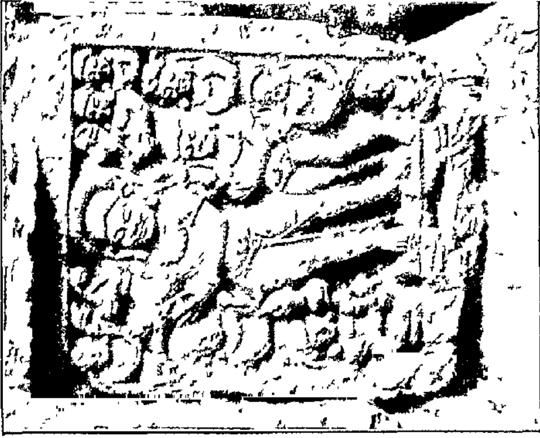
The colonnade consists of 69 cells and is built upon a basement 5′3″ in height. The average interior dimensions of the cells are 3′7″ to 3′9½″ by 4′10″ in width. The parti-walls are 3′ 6″ to 4′ thick, those flanking the middle cells of each row are thicker, being 7′ to 7′ 9″ in width. The cells are preceded by a peristyle resting on 16-sided columns with plain square bases and capitals (Plate XXIX, *a*), which are of the same design as the capitals of the twelve large pillars in the corners of the colonnade. The pillars in the corners of the colonnades, those on each flank of the middle shrines of the wings and four others in the front and rear of the gateway are square. There are altogether 66 round columns of the smaller size, twelve large ones on the four sides of the gateway and eighteen smaller columns outside the front row. The cells were entered by doorways headed with trefoiled arches enclosed in pediments of the usual type. The latter rested on gracefully carved pilasters. The commonest patterns which adorn these pilasters consist of zigzags ornamented with rows of dots, lotus and other ornaments as in cell No. 13, vertical rows of vases with lines of dots, sometimes alternating with rows of geese (as in cell No. 16), spirals, etc. The pilasters of cell No. 46 are decorated with vertical rows of trefoiled niches containing divine figures attended by archangels and human attendants.

The entablature over the colonnade has been everywhere thrown down except in the case of a few cells in the north row. The total height of the colonnade, including the basement up to the foundation of the ceiling, is about 18′. No blocks which were employed in the construction of the roof have yet been recognised anywhere in the débris. The roof may have been flat and composed of horizontal stones. This assumption receives support from the following statement of Mr. Moorcroft regarding the colonnade of the Mārtāṇḍa temple in his time " The roofs had generally fallen in, but where remaining were of large flat slabs of stone."[1] On the other hand General Cunningham has conjectured very plausibly, that the roof was triangular in section. The middle cells of the colonnades must have been gabled, like that of the central shrine. The middle shrine of the east wing contains a stone pedestal, 2′ 2″ by 2′ 10″ by 1′ 7″, placed against the back wall. The image which stood on it must have been destroyed. There are no pedestals in the other side shrines, but it is possible that some of the smaller recesses also held statues, since pedestals are *in situ* in some of them. The cells in the western corners of the colonnade are made to open outwards, as they could have no direct communication with the courtyard in the middle. The other two corners are solid and might have been crowned with some sorts of turrets or other ornaments. On the outside the walls of the colonnades are plain save for shallow pilasters which project from the centre of the parti-walls. The western row of cells has a series of columns on the outside as well as on the interior, but the cells themselves are closed with plain walling on the outside.

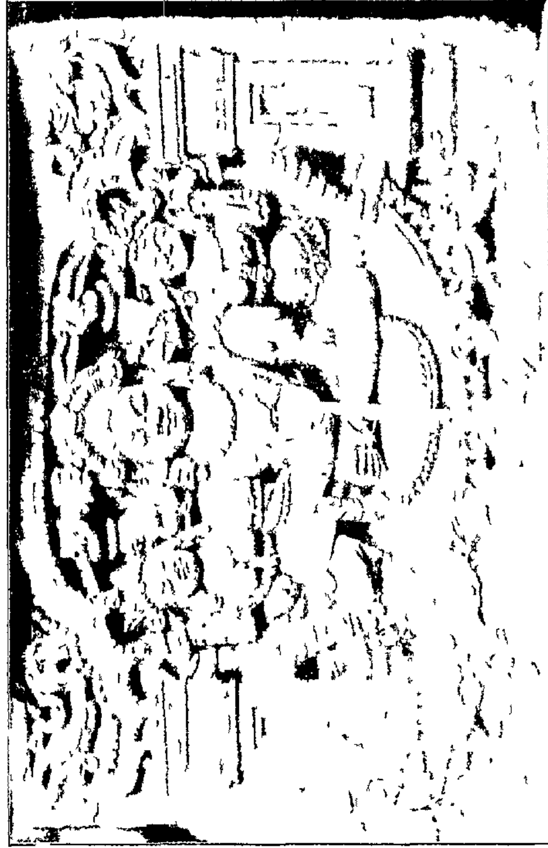
The gateway to the colonnade must have been a very imposing structure.[2] It is, as usual, divided into two chambers of identical dimensions, literally covered with

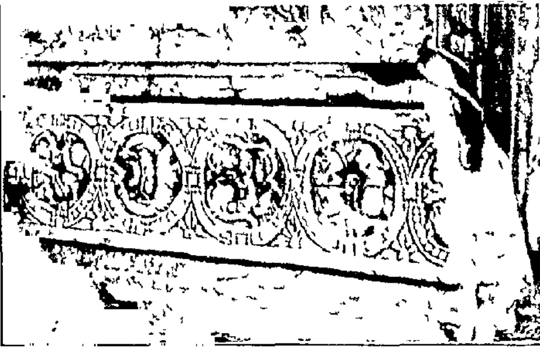
[1] *Travels*, Vol. II, p. 256. On reconsideration of the question, I am of opinion that General Cunningham's view that the roof of the colonnade was triangular in section is more plausible.

[2] General Cunningham remarks (*J. A. S. B.*, 1848, p. 280) that the width of the gateway was made equal to that of the projecting porches of the central shrine. In reality the width of the gateway is equal to the total width of the central shrine.

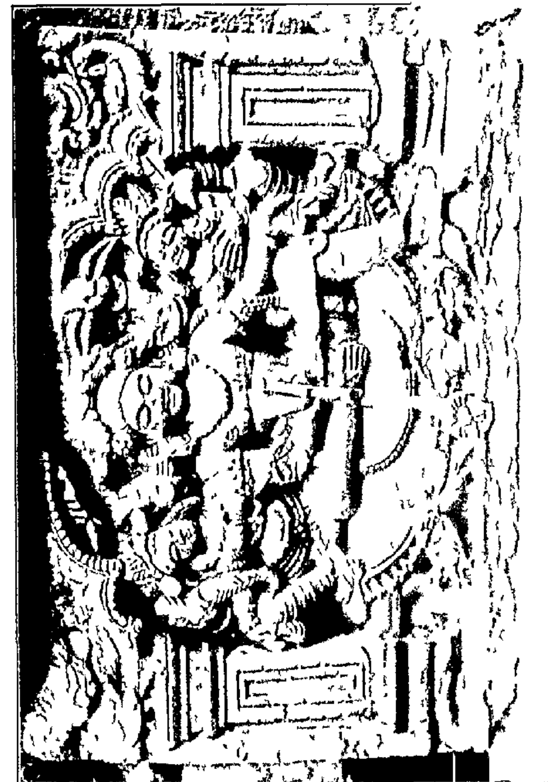


c





b





a

SCULPTURES OF AVANTISVAMI TEMPLE

figure decoration. The entrance, which occurs in the middle wall, is 6′ 6″ wide and was provided originally with wooden doors. Each of its flanks was adorned with a vertical row of three niches with double pedimental roofs supported on columns of the usual type, the whole row being enclosed in an ornamental frame. The sides of the latter are adorned with amorous couples supported by four-armed seated atlantes. On either side of this frame are scrolls of arabesque. The niches contain divine figures which were covered with verdigree and could not be recognized. The verdigree has now been removed, but the figures in the upper niches on each side are too much defaced to be identified. The lowest niche on the left flank contains a two-armed figure of Ganges with a lotus stalk in right hand, and a water pot in the left. She is standing on her vehicle, the crocodile, which has a coiled tail and has raised its snout upwards towards the deity. A female attendant standing to her proper right holds an umbrella over her head. The niche corresponding to it on the other side contains a figure of Yamunā similarly depicted. Her vehicle, which is a tortoise, is, however, obliterated. Below each of these niches is a spirited scene showing a group of three figures between a pair of walnut trees. The middle figure is a prince and the other two female figures, all three seated on separate cushions. The prince presents a bowl of sweets to the lady to his left. On the front of the cushions are three parrots. The side walls of the chamber have each a single large niche enclosed in a similar frame. These niches also contained figures of the two river goddesses similarly delineated. Below the niche which contains the figure of Gaṅgā we notice two friezes of considerable interest. The upper frieze represents a row of nine medallions, each containing a four-armed figure of Garuḍa. His lower hands are in each case joined before the chest. The emblems in the upper hands are two of the four objects: a vase, a garland, a mace and a lotus flower.

The walls of the gateway are standing up to the cornice, 20′ 3″ high above the floor of the gateway. No parts of the roof have survived. It was presumably of the usual gabled type, but no complete examples of gateways have come down to us except the gateway to the Buniār temple, which is only a little better preserved than the gateway of this temple. The form of the roof, therefore, cannot be precisely ascertained. So much, however, is certain, that it was supported both on the front and the rear on four columns, the bases of all of which are quite intact. The middle columns, which were placed wider apart than the side ones for purposes of passage into the temple, are round, 9′ 4″ in girth at the base and 24-sided. Each side is flat, and a line of rough surface runs down each side. This is the case with all the round columns of the colonnade also. May we assume that they were meant to be fluted like classical columns but the flutes could not be cut for some unknown reason. Fragments of these columns were found right on the floor level of the courtyard, showing that these columns fell down before the floor was covered with débris. The bases of these columns are square and plain (*vide* plan). The bases of the side columns are moulded. The columns which occupied the eastern corners of the gateway must have stood in position until only two or three centuries ago. A fragment of the square column in the south-east corner is illustrated in Plate XXVII, *b*. The side which faced the wall of the gateway is naturally left rough. The other sides are nicely carved. The carvings on the principal face may be seen in the photograph referred to.

Horizontal lintels rested on the columns and the side walls, and supported the superstructure of the gateway, which consisted of a blank trefoil arch enclosed in an imposing pediment. Each lintel consisted of three pieces, which met on the top of the two middle columns. One of these pieces, which belonged to the east façade, measures 9′ 2″ long by 5′ 5″ wide by 3′ 3″ thick. The carvings on the principal face of the lintel consist of six rows of birds and other ornamental devices. The capitals, which rested on the square columns in the corners of the gateway unlike the capitals of all other columns in the temple, are provided with projecting brackets similar to those in the Buniār temple.

A feature of this gateway, which is found in only one other example, namely, in the Mārtāṇḍa temple, is the open porticoes, one in front of each face of the structure, supported on an extra pair of columns of the same dimension and character as the middle columns of the gateway. The lintels which rested upon these are huge blocks of stone profusely carved on all faces which were meant to be visible. Parts of these porticoes must have stood in position until comparatively recent times. Only one column with its superimposed lintel is now standing outside the north-west corner of the gateway. The other column with its lintel, which was standing on the south side of the gateway on the occasion of Moorcroft's visit, has fallen down since his time and was naturally found quite near the surface of the ground. For one of the caps of these porticoes see Plate XXIX, *b*.

The gateway is furnished with stairs, on east and west, of the same design as the stair to the central shrine. Both of them are partly ruined. The north flank wall of the outer stair has, on the front, the same Vishṇu scene as we observe on the stair of the central shrine. The inner side, however, shows a door-keeper (*dvārapāla*). The panels on the south flank wall are missing.

The panels on the front of the flank walls of the inner stair to the gateway depict the same subject, namely, Gōpāla-Kṛishṇa and a cowherdess (*gōpī*) seated embracing each other. The northern panel, which is better preserved than the other, also shows a cowherd boy playing on a flute (*vaṁśī*) at the proper right end of the composition and a female figure on the other side. The panels on the inner sides of the flank walls contain door-kepeers (*dvārapāla*), each of which holds a mace.

Coins.

The total number of coins discovered in the Avantisvāmi temple is 121, besides some badly defaced ones. These are all of copper except a single one of Maḥmūd S͟hāh Durrānī, which is of silver. The earliest of these coins are a few coins of Tōramāna of the usual type. About a dozen coins belong to the ancient Hindu rulers of Kashmir. Only four go to the share of the Durrānī Paṭhān rulers, and there are a few modern coins of the Dogra Maharajas. All the rest belong to the Muhammadan Sulṭāns of Kashmir. Among these we may specially notice a find of 87 copper coins contained in a small earthen vessel which came to light 56 feet east of the peristyle of the Avantisvāmi temple and six feet below the surface. Eighty-five of them belong to the coinages of Zainu-l-'ābidīn, Ḥaidar S͟hāh, Ḥasan S͟hāh, Muḥammad S͟hāh and Fatḥ S͟hāh and the remaining two are of Tōramāna. This fact is interesting, as it shows that the coins of Tōramāna were still in abundant

use in the end of the 15th century. The Durrānī coins include one coin each of Timūr Shāh, Zamān Shāh, Maḥmūd Shāh and Nūru-d-dīn. The coin of Maḥmūd Shāh bears on the obverse the following Persian couplet:

بتوفیق الله خسرو گیتی ستان محمود شاه

The couplet on the coin of Nūru-d-dīn runs

سکه شد روشن ز شاه نورالدین

رایج از مخدوم قطب العدفعین

SCULPTURES.

In addition to the sculptures carved on the several stairs, the gateway and other parts of the edifice, the excavations yielded a large collection of Brahmanical statuettes all carved in the round. Most of these are of the same date as the temple itself and must originally have been enshrined in the recesses of the peristyle. It has been observed above that in some of the cells the pedestals of these images are still extant, and that on some of them the feet of images also remain. All of these early images found in the temple of Avantisvāmi are Vaishṇava, except two fragmentary images, one of which represents the Ardhanārīśvara-Śiva (Plate XXVIII, *a* and *f*) and is fully described below. The other Śaiva image is a part of a Gaṇēśa statuette. Both of these statuettes, I am of opinion, must originally have belonged to the temple of Avantīśvara-Śiva described below, and must have been rescued and transferred to this temple after the desertion of that edifice.

I have discussed above the characteristics of the Kashmir type of the Vishṇu image. It is difficult as yet to throw any light on its early development, as no images of a date prior to the mediæval period have yet been noticed anywhere. The workmanship displayed in the execution of these statuettes is quite exquisite.

One more sculpture that deserves special notice here, is a figure of Śrī (ht. 8″; width 4″) which came to light west of the gateway. The goddess is seated (Plate XXVIII, *d*) in easy attitude on a throne supported on a pair of lions, while a pair of elephants are pouring water over her head. In her left hand she holds the leafy stalk of a lotus flower, which rises from a vase placed in front of the throne supported on a pot of ambrosia (*amṛitaghaṭa*). The object in her right hand is, in conformity to the *āgamas*, presumably a *bilva* fruit. It is interesting to note that an Indo-Greek image now preserved in the Indian Museum, London, which M. Foucher believes[1] to have originated from Kashmir, is very similar to the mediæval image of Śrī discovered in the Avantisvāmi temple. M. Foucher noticed for the first time another statuette in the same style at a village called Brāṛ between Bhavan-Mārtāṇḍa and 'Aishmaqām in Kashmir. From an examination of these two images M. Foucher arrives at the conclusion that the Brahmanical goddess Lakshmī has been derived from representations of the Buddhist Hāritī, consort of Kuvēra.

I subjoin a list of the principal sculptures:

(1) Image of Vishṇu described on page 45.

(2) Image (ht. 8″; width 4″) of Śrī described above.

[1] Foucher *Les images indiennes de la fortune* in *Memoires concernant l' Asie Orientale, 1913.*

(3) Lower portion (ht. 1′ 6″) of an image of Vishṇu of the same type as No. 1. The existing portion, which is broken into three fragments, contains only the feet of the deity, with a half-length figure of the Earth-goddess between them, a female chauri-bearer to the right, and a male attendant holding a fly-whisk to the left. The sculpture was found in the courtyard of the temple seven feet below the surface.

(4) Image (ht. 2′ 9½″) of Vishṇu, without feet and arms, of the same type as No. 1. Found in the courtyard of the temple, six feet below the surface.

(5) Image (ht. 2′ 3″) of Vishṇu of the same type as the above. The lower part of the legs, attendants and base are missing.

(6) Fragment (ht. 1′ 4½″) bearing a figure of a female chauri-bearer. The fragment is broken from the proper right side of a statue of Vishṇu of the same type as No. 1.

(7) Fragment (ht. 1′ 3″) representing a male chauri-bearer from the proper left side of a Vishṇu image of the same type as No. 1.

(8) Fragment (ht. 1′ 3⅓″) showing a female chauri-bearer from the proper right side of a statue of Vishṇu of the type of No. 1.

(9) Fragment (ht. 1′½″) similar to No. 8.

(10) Upper half (ht. 11½″) of a statuette in the round representing a male figure holding a mace in the right hand and wearing a garland and a three-peaked coronet. The statuette presumably represents a door-keeper.

(11) Fragment (ht. 7″) showing a female chauri-bearer which is broken from the proper right side of a Vishṇu image of the usual type.

(12) Legs (ht. 1′ 3½″) of a Vishṇu image of the usual type.

(13) Fragment (ht. 11½″) showing both right hands of a Vishṇu image nicely carved.

(14) Fragment (ht. 8″) showing the left hand of a figure holding what appears to be a shield.

(15) Fragment (ht. 8½″) showing a bust of the Earth-goddess from a Vishṇu image of the usual type.

(16) Fragment (ht. 6″) of a Vishṇu image showing the right hand of a chauri-bearer and a portion of the deity's garland.

(17) Fragment (ht. 6″) similar to No. 16.

(18) Fragment (ht. 5½″) showing a male chauri-bearer broken from the proper left side of a Vishṇu image of the usual type.

(19) Base (width 4½″) with the feet of a Vishṇu image and those of the usual chauri-bearers.

(20) Base (width 9½″) similar to No. 19.

(21) Base (width 4″) similar to No. 20.

(22) Fragment (width 6½″) of a base similar to No. 21.

(23) Fragment (ht. 4″) representing the three heads of a deity, with elaborate coiffeurs.

(24) Fragment (ht. 4½″) showing the right arm of a celestial (*dēva*) followed by his spouse who held a chauri

(25) Fragment (ht. 7″) showing a female figure.

(26) Fragment (ht. 3½″) showing head of a *garuḍa*.

(27) Statuette (ht. 1′ 9½″) of Vishṇu of the same type and technique as No. 1. The feet of the deity, and the female chauri-bearer who stood to his right are missing. The statuette was found west of the gateway, 10′ below the surface.

(28) Fragments representing middle part of a four-armed seated figure, most probably Ganapati. The left hands hold a ball and staff (?) The lower right hand grasps a bowl, *i.e.*, *pāyasa-pātra*. The upper right hand is missing. The neck of the god was encircled with a snake. The sculpture is of the same date as the temples themselves. It was unearthed in the Avantisvāmi temple, but originally belonged to the Avantīśvara temple.

(29) Top of an umbrella (diam. 5″), which must have originally belonged to a miniature votive image. The underside of the umbrella is decorated with linear patterns and a band of circular rings. Images of Buddhas and Bōdhisattvas were protected with umbrellas in the Kushāṇa and earlier periods, and the same practice seems to have been followed in Kashmir for miniature statues which pilgrims presented at Brahmanical temples in the mediæval period. The umbrella is certainly of a much later date than the temple of Avantisvāmi in which it was found.

(30) Post (ht. 8¼″ including tenons), square in section, which must have belonged to an umbrella of the type of No. 29. The sides are adorned with zigzag patterns and there are round tenons at each extremity. The post is much later in date than the temple of Avantisvāmi in which it was found.

(31) Lower half of a statuette in the round representing Ardhanārīśvara-Śiva. The left half, in accordance with the canon, shows the female counterpart of the god and is, therefore, adorned with ornaments, namely, finger rings, bracelets and anklets. The right leg is clad in a *dhōtī*, the tassels of which fall between the legs and on the thigh. The total number of arms of the deity is not known. The only arm that remains on the left and belongs to Pārvatī holds a nicely shaped pot (*kalaśa*). To the right of the deity stands a four-armed figure of Gaṇapati. His trunk rests on a bowl of sweetmeats (*mōdaka*) held in his upper left hand. His upper right hand grasps his second tusk, which he used as a weapon in a fight with the demons. The emblems in the lower hands are indistinct. The figure standing to the left of the deity is Kumāra-Kārttikēya. He has six heads neatly arranged in two rows one above the other, but only six arms, instead of twelve. The attributes in the several hands cannot be recognized except one or two. These are a thunderbolt (*vajra*) in the lowest right hand, and a bell (*ghaṇṭā*) in the uppermost left. The bull, the vehicle of Śiva, is nicely carved on the reverse of the sculpture, his head only being visible on the front above the figure of Gaṇapati.

The sculpture is of the same date as the temples being described. It was found in the Avantisvāmi temple, but was originally worshipped in the Avantīśvara temple. Plate XXVIII, *a* and *f*.

(32) Plaque (ht. 4¾″; width 3¾″) representing Pāñchika seated in easy attitude with his consort Hāritī seated to his left. Kuvēra holds what must be interpreted as a bag of money. His left leg is laid flat on an upturned treasure vase. Hāritī holds a cornucopia in her left hand. On the back of the plaque we notice the words: *Ōṁ svasti*, in Śāradā characters. The sculpture dates from the Muhammadan period. But though the workmanship is poor, the sculpture still follows the Gandharan models, and the original meaning of the emblems was not yet forgotten. Plate XXVIII, *e*.

Pottery.

1. Large-sized jar (Kash. *wūṇṭ*; ht. 4′ 10½″; inner diameter at mouth 1′ ⅝″) with a conical bottom and bulbous body and a very low rim, which was used for the storage of grain or water. Such jars are made in Kashmir and used for the same purpose to this day, and in one or two of the jars discovered at Avantipura rotten corn was actually found. The jar is made of coarse clay, but well baked, though it now shows hardly any trace of any kind of colour-wash.

The jar is one of three of its kind which were unearthed a few feet above the floor of the courtyard of the Avantisvāmi temple. That, however, does not mean that these jars are as old as the temple itself.

2. Large-sized jar (ht. 4′ 7″; diam. at mouth 1′ ½″) of about the same shape as No. 1. The jar was standing quite close to No. 1.

3. Large-sized jar (ht. 4′ 5″; diam. at mouth 1′) similar to the above. On the side of the jar is cut a brief record in late Śāradā characters. The inscription apparently contained a mere name of a pilgrim or a priest, but it is now quite illegible. The jar was standing close to Nos. 1 and 2.

4. Large-sized jar (ht. 2′ 6½″; diam. at mouth 9½″) of the same shape as the preceding jars.

5. Jar (ht. 2′; diam. at mouth 6½″) with round bottom and grooved rim at the mouth, made of fine clay with traces of red colour. It was found only 2½′ below the surface, to the south-east of the peristyle of the Avantisvāmi temple, and is of a fairly modern date.

6. Jar (ht. 1′ 7″; diam. at the mouth 6″) of the same shape as No. 5, made of very coarse buff clay with traces of red colour. Found at the Avantisvāmi temple near the surface.

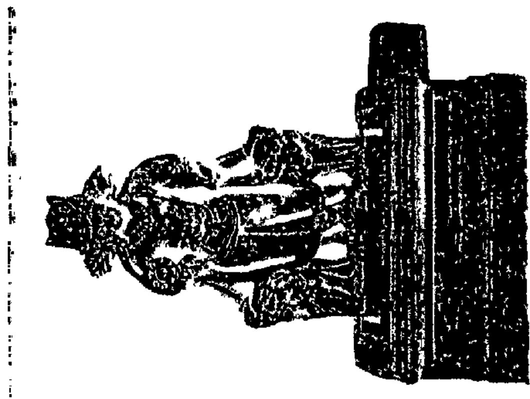
7. Large-sized *ghaṛā* (ht. 1′ 7″; diam. at the mouth 5″) nearly spherical in shape, of fine buff clay which has been coloured red. Below the neck on one side is a square diagram with a dot at each angle. The jar was found outside the south-west corner of the peristyle of the Avantisvāmi temple, 6′ below the surface.

8. Pitcher or *ghaṛā* (ht. 1′ 5½″; diam. at the mouth 4½″) with a round bottom made of rough clay with red colour. The vessel was found 2′ above the floor of the courtyard of the Avantisvāmi temple.

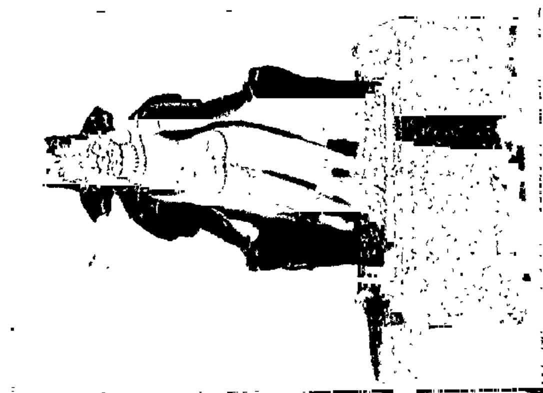
9. Pitcher or *ghaṛā* (ht. 1′ 4″; diam. at the mouth 4″) of coarse buff clay with red colour. There is some simple decoration round the neck. Found at the Avantisvāmi temple.

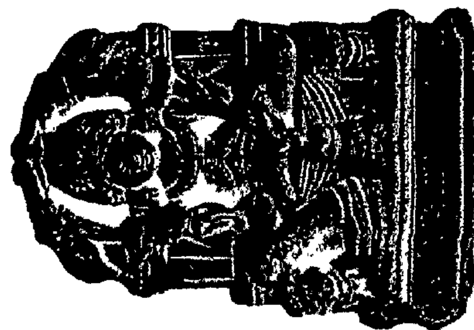


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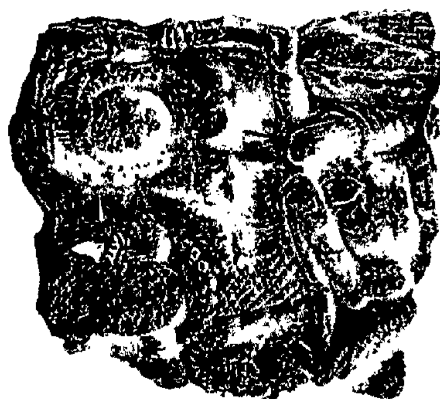


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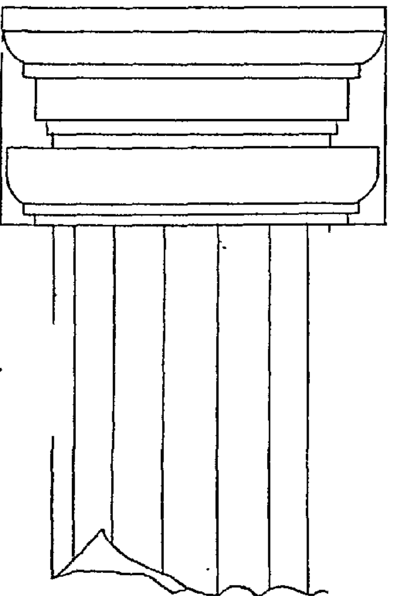


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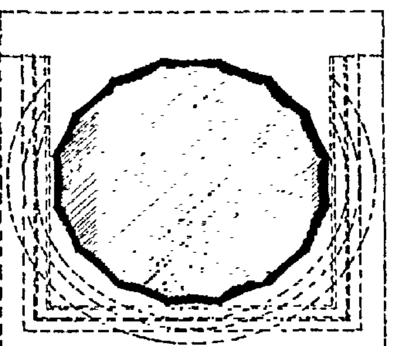


Sculptures at the Avantisvami Temple.

TEMPLE OF AVANTISVAMI (VISHNU).



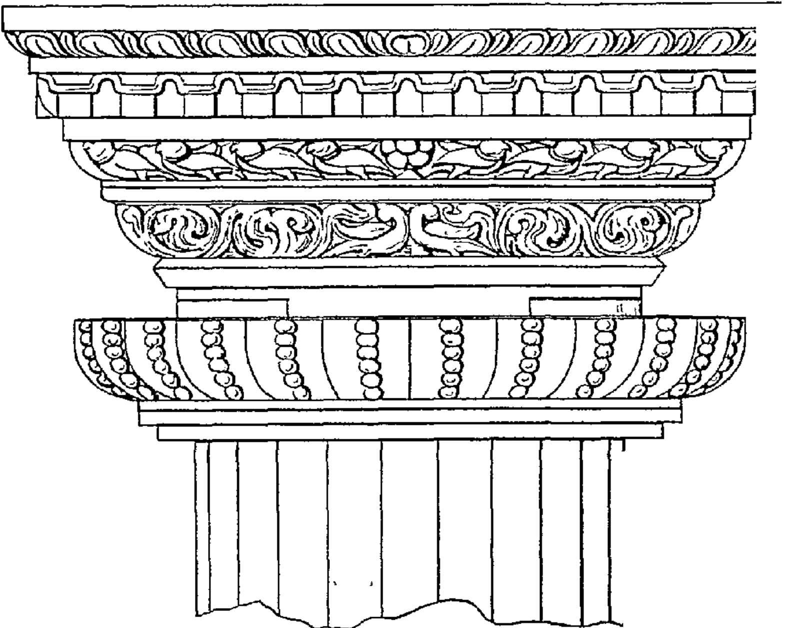
ELEVATION.



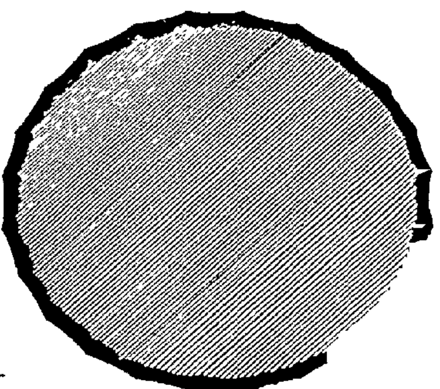
PLAN.

a, CAPITAL FROM COLUMN OF PERISTYLE.





ELEVATION.



PLAN.

b, CAPITAL FROM COLUMN OF ENTRANCE PORCH.

10. Cooking pot or *hāṇḍī* (ht. 7″ ; diam. at mouth 4″) of ordinary shape, well baked with red colour. The pot is decorated with plain and dotted lines round the body. It was found to the south-west of the peristyle of the Avantisvāmi temple, 4′ below the surface.

11. Small water jar (ht. 6″; diam. at mouth 4″) of common shape. No ornamentation. Found to the west of the peristyle of Avantisvāmi temple, 4′ below the surface.

12. Small water jar (ht. 5½″ ; diam. at mouth 3¼″) with lid. The body of the vessel is adorned with rows of circles and crescents. It is made of fine clay with a pink wash. The vessel was found outside the north-east corner of the peristyle of the Avantisvāmi temple, 8½′ below the surface, and is assignable to about the 15th century A.D.

13. Small water or milk jug (ht. 7″ ; diam. at mouth 4¾″) without neck. Found at the Avantisvāmi temple.

14. Small water jug (ht. 5½″ ; diam. at mouth 4″) originally furnished with a spout, which is broken off. Found at the Avantisvāmi temple.

15. Small water jug (ht. 6″ ; diam. at mouth 3″) with bulbous body, narrow neck and projecting rim adorned with raised concentric lines round the neck. There was a spout at the side which is now broken off.

16. Small water jug (ht. 5½″) with the top broken off. Found in the area east of the peristyle, 7½′ below the surface.

17. Small water jug (ht. 4″) with narrow bottom, without top. It was found at the same level as No. 16.

18. Earthen brazier or *kāṅgaṛī* (ht. 5″ ; diam. at mouth 4½″) of the usual shape. The wicker-work frame is naturally gone. It is interesting to note that Jōnarāja refers to such braziers under the name of *kāshṭhāṅgārikā*. The vessel was found in the area on the east of the peristyle of the Avantisvāmi temple, 5′ below the surface. To judge from the level at which it was found, we may assign it to about the middle of the 16th century A.D.

19. Cooking pot or *hāṇḍī* (ht. 5″ ; diam. at the mouth 3″).

20. Small water goblet or *surāhī* (ht. 5″), with spherical body and a very narrow neck. Found outside the north-west corner of the peristyle of Avantisvāmi temple near the original floor level.

21. Bowl (ht. 4″ ; diam. at top 6¾″), which must have been used for eating rice-curry from. Fine clay with red colour. Found in the area east of the Avantisvāmi temple, 6′ below the surface. It probably dates from the 15th century A.D.

22. Bowl (ht. 3¾″; diam. at mouth 6¾″) of dark-coloured clay adorned with some line patterns near the bottom. A part of the vessel is broken off. Found in the area east of the Avantisvāmi temple, 8′ below the surface.

23. Object of burned clay (ht. 6¾″ ; diam. at base 9″) in the shape of a large ring with a handle at the top. Through the handle runs a hole. In the villages of Kashmir contrivances of this kind are used for twisting thread. Found in the area east of the peristyle of the Avantisvāmi temple, 4½′ below the surface.

24. Small jug (ht. 5¾″ ; diam. at mouth 2″) of cylindrical shape with flat bottom made of coarse clay with red colour. Several jugs which came to light at the Jaubrāṛa

temple are of this type. Found in the area east of the peristyle of the Avantisvāmi temple, 9′ below the surface.

25. Small jug similar to No. 24.

26. Child's fireplace (ht. 3″) of the same shape as those used to this day by boatmen in Kashmir. Found in the area on the east of the peristyle of the Avantisvāmi temple, 4′ below the surface.

27. Lid (ht. 1½″) of a small jar of the common shape. Found 3′ below the surface in the area east of the peristyle of the Avantisvāmi temple.

28. Incense-burner (ht. 4″) with the upper part and part of the handle broken off. Found at the Avantisvāmi temple.

29. Small jug (ht. 5″) with a double rim around the neck, possibly an oil measure. Vessels of this shape are not now generally noticed in the bazars of Kashmir. Found at the Avantisvāmi temple. Pl. XXX, 2.

30. Child's cooking pot (ht. 4″; diam. at the mouth 2½″), found in the area east of the peristyle of the Avantisvāmi temple, 6½′ below the surface. Pl. XXX, 15.

31. Small jar (ht. 3¾″), found 6′ below the surface inside the south-west corner of the peristyle of the Avantisvāmi temple.

32. Potter's dabber (ht. 4″) of the usual shape. Found at the Avantisvāmi temple.

33. Bottle (ht. 4½″) with tall narrow neck. Found on the west of the peristyle, 11 feet below the surface. Pl. XXX, 3.

34. Small goblet or *surāhī* (ht. 4½″).

35. Small goblet or *surāhī* (ht. 3¼″) similar to No. 34. Found 3′ above the level of the floor of the courtyard of the Avantisvāmi temple. Pl. XXX, 5.

36. Bottle (ht. 3½″) with a broad projecting rim of a pleasing shape. The clay is not very fine but the vessel was coloured red, traces of which remain. Found 3′ above the floor of the courtyard of the Avantisvāmi temple. Pl. XXX, 1.

37. Small jar (ht. 3″; diam. at mouth 1½″) of an attractive shape. Pl. XXX, 6.

38. Small jar (ht. 2¼″; diam. at mouth 1¼″), found 7½′ below the surface east of the peristyle of the Avantisvāmi temple.

39. Ink-bottle (ht. 2½″) of the usual shape. Found 6′ above the floor of the courtyard of the Avantisvāmi temple. Pl. XXX, 8.

40. Ink-bottle (ht. 2¼″) similar to No. 39. Found in the area east of the peristyle of the Avantisvāmi temple, 7′ below the surface. Pl. XXX, 7.

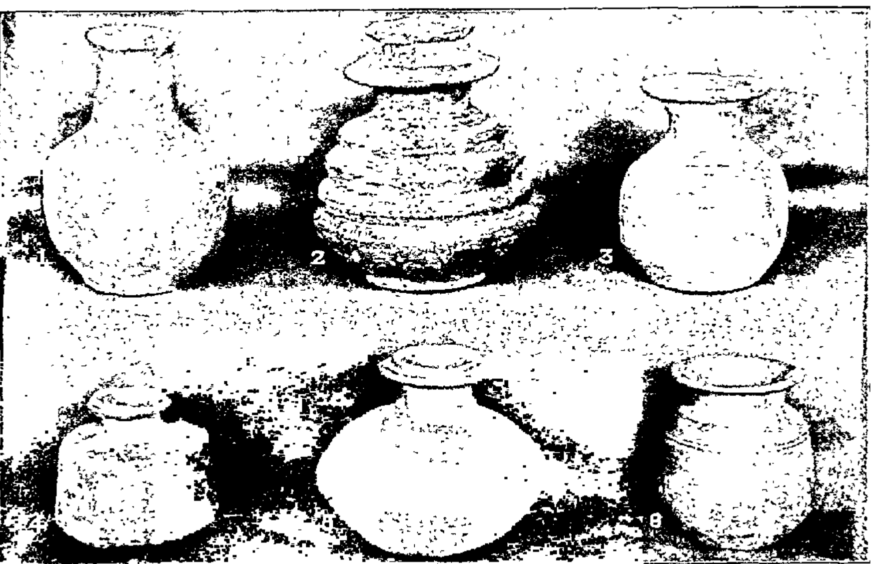
41. Toy cooking pot (ht. 2″; diam. at mouth 1¼″) of the ordinary shape. Found in the area east of the peristyle of the Avantisvāmi temple, 7′ below the surface.

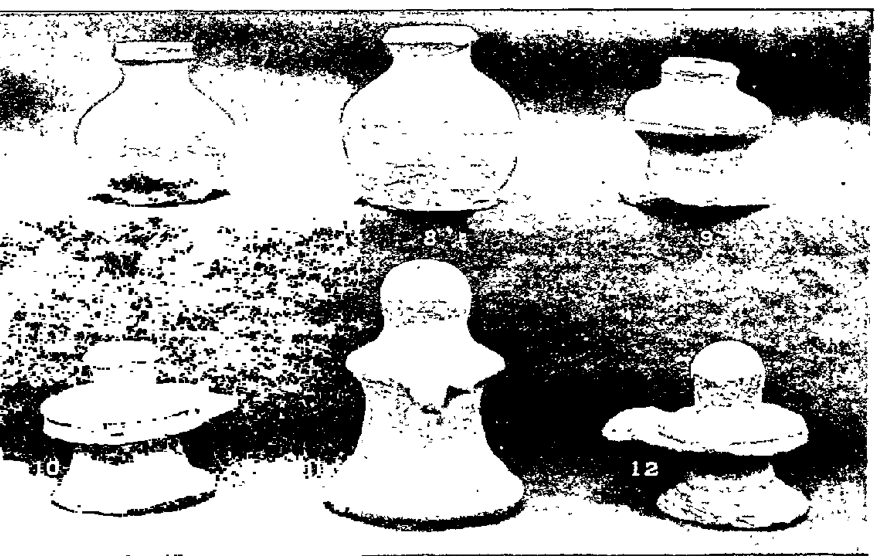
42. Ink bottle (ht. 2½″) of a nice shape. Found 3′ above the floor of the courtyard of the Avantisvāmi temple. Pl. XXX, 4

43. Ink bottle (ht. 2¾″) with a flat bottom and hollowed out body. The pot was found 8′ below the surface on the south of the peristyle of the Avantisvāmi temple. Pl. XXX, 16.

44. Ink-pot (ht. 2″) similar to No. 43 in shape, except that there is no neck. There are four holes round the mouth, which were used for suspending the pot from a wooden writing board. Found 8′ below the surface near the gateway of the Avantisvāmi temple. P. XXX, 13.

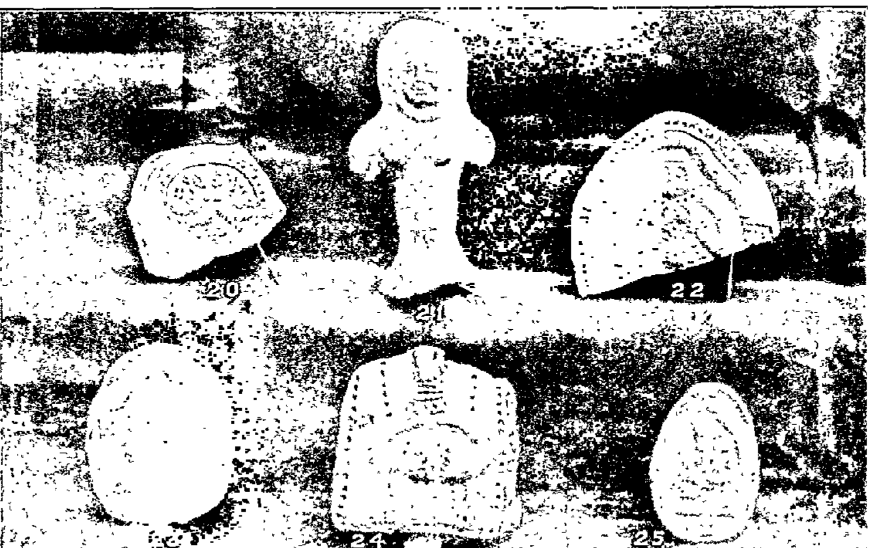
45. Small bowl (ht. 2″; diam. at mouth 1¾″) which has been probably used as





c





d

a, *b* and *c*. POTTERIES.
d. TERRACOTTA FIGURINES.

an ink-pot, when white clay was employed as the writing substance. Found at the Avantisvāmi temple. Pl. XXX, 17.

46. Cup (ht. 2″) with grooved rim, which has been used for sipping water (*āchamana*) in the *pūjā*. Found in the area east of the peristyle of the Avantisvāmi temple, 7′ below the surface.

47. Rectangular basin (4¼″ by 3″ by 1½″) to hold rice grains or other materials of worship. The vessel is made of fine clay and coloured red. Found south of the peristyle of the Avantisvāmi temple, 2½′ below the surface. Pl. XXX, 18.

48. Bell (ht. 3½″), of usual shape. The tongue which was suspended by a piece of string is missing. Found south of the peristyle of the Avantisvāmi temple, 6′ below the surface. Pl. XXX, 19.

49. Miniature image hollow inside (ht. 2½″) in the form of a little *liṅga* on a circular pedestal furnished with a spout. Such images are offered to this day on the Śivarātri festival. The image was found 1′ above the floor of the courtyard of the Avantisvāmi temple. Pl. XXX, 10.

50. Miniature image (ht. 3¼″) similar to No. 49. Found 2½′ above the floor of the courtyard of the Avantisvāmi temple. Pl. XXX, 11.

51. Miniature image (ht. 2½″) similar to No. 49. Found south of the peristyle of the Avantisvāmi temple, 10′ below the surface. Pl. XXX, 12.

52. Miniature image (ht. 3″) similar to No. 49. Found 4′ above the floor of the courtyard of the Avantisvāmi temple.

53. Miniature *liṅga* (ht. 3″) which formed part of an image similar to No. 49.

54. Miniature image (ht. 2″) similar to No. 49, but unlike it, solid. Found in the courtyard of the Avantisvāmi temple, 6′ above the floor.

55. Object (ht. 2¼″) resembling an ink-pot. The bottom, however, is hollow and the article might have been used as a stand for a stick of *dhūpa* or other material. Found in the courtyard of the Avantisvāmi temple, 3′ above the floor. Pl. XXX, 9.

56. Top (ht. 2″) of a goblet with a perforated screen to prevent flies, etc., from entering the vessel. Found in one of the cells of the west colonnade of the Avantisvāmi temple, 7′ below the surface. Pl. XXX, 14.

57. Lid (diam. 3¾″) of a water jar perforated with holes for the passage of water. Found outside the south-west corner of the peristyle, 7½′ below the surface.

58. Small jar (ht. 1¼″) ornamented with line patterns. Found 1½′ above the floor of the courtyard of the Avantisvāmi temple.

59. Top of a lid (ht. 1¾″). Found in the area east of the peristyle of the Avantisvāmi temple, 3½′ below the surface.

60. Lid (ht. 2¾″) of a pitcher or other vessel furnished with a vertical handle at the top. Found in the courtyard of the Avantisvāmi temple some 12′ below the surface.

61. Lid (ht. 2¼″) with a deep broad cavity in the middle. Such lids are not made now. Found at the Avantisvāmi temple.

62. Lid (ht. 2″) of the shape of a bowl with broad rim. Found at the Avantisvāmi temple.

63. Incense-burner consisting of a round bowl (ht. 1¾″) with a stout horizon al handle which is partly preserved. The burner is dark with soot. Found at the Avantisvāmi temple.

64. Circular cup (ht. 1½") of black clay. Found at the Avantisvāmi temple.

65. Lid(diam. 3¾") of a pitcher or other vessel. Found in the area east of the Avantisvāmi temple.

66. Earthen lamp (diam. 3") of the usual type. The lip is burnt. Found to the south of the Avantisvāmi temple 5′ below the surface.

67. Earthen lamp (diam. 2¾") of the usual type. The lip is burnt. Found in the courtyard of the Avantisvāmi temple, 7′ below the surface.

68-69. Two earthen cups (diam. 3¾" & 3½") which have been used as lamps. Found in the courtyard of the Avantisvāmi temple, 3′ above the floor.

70. Wheel (diam. 3½") of a toy-cart (*mṛichchhakaṭika*) adorned on one side with two concentric rows of dots and a circular hole in the centre for the axle, which must have been of wood. It was found in the courtyard of the Avantisvāmi temple, 1′ above the floor.

71. Fragment of a wheel (diam. 4") of a toy-cart of clay. Found south of the Avantisvāmi temple, 7′ below the surface.

72. Circular object (diam. 1¾") with incised edge, and round cavity on each side, which might possibly have served the purpose of the third or hind wheel of a clay tricycle similar to those excavated at Bhīṭā and other sites in India. The cavities held the ends of a wooden frame which was attached to the axle of the front wheels. Found at the Avantisvāmi temple.

73. Circular object (ht. 1½"), convex on the upper side, with a circular hole in the centre which has been evidently used for the purpose of making twine. Such objects are used for that purpose to this day and are known in Kashmiri dialect by the name of *ḍugur*. Found outside the west wall of the colonnade of the Avantisvāmi temple, 13′ below the surface.

74. Circular object (ht. 1") similar to No. 73. Found in the area east of the Avantisvāmi temple, 4½′ below the surface.

75. Lower part (ht. 2") of an earthen tobacco pipe (*chilam*). The bottom of the *chilam* proper is pierced with holes to let smoke escape without the ash running into the *ḥuqqa*. Found in the area east of the Avantisvāmi temple, 6′ below the surface.

76. Top (ht. 2") of a goblet adorned around the mouth with a lotus pattern. Found in the area east of the Avantisvāmi temple, 5½′ below the surface.

TERRACOTTA OBJECTS.

1. Earthen mould (ht. 2¼"; width 2") representing, to judge from a plaster of Paris cast, a female deity seated in easy posture (*lalitāsana*), holding what looks like a lotus with stalk in each hand. To the proper left of the deity is an uncertain figure, meant possibly for a votary. Found in the courtyard of the Avantisvāmi temple, 2′ above the floor.

2. Earthen plaque (ht. 3" ; width 2¼") containing a four-armed figure of Gaṇapati seated in Indian style under a trefoil arch. The deity has a dotted halo around his head, and as usual, a large belly (*tundila*). His elephantine trunk goes out, as usual, to a bowl of sweets held in his lower left hand. One of his right hands holds his second tooth, but the emblems in the remaining two hands are uncertain. The finger-mark on the back of the plaque is due to the pressing of the clay on to the

mould in the production of the impression. The tablet was found in the courtyard of the Avantisvāmi temple near the floor level, and would appear to be of about the same date as the erection of the temple. Pl. XXX, 23.

3. Terracotta plaque (ht. $2\frac{1}{2}''$) showing Gaṇapati seated in easy attitude. He has broad ears and his trunk, as usual, rests on a bowl of sweets held in his left hand. The deity has only two arms. Found in the area east of the Avantisvāmi temple 6′ below the surface. The style and the depth at which the tablet was found point to the 14th or 15th century as its date. Pl. XXX, 25.

4. Female figure (ht. $4\frac{1}{2}''$) wearing a long loose garment; the legs are not indicated. A plain band round the throat presumably does duty for a necklace. Found at the Avantisvāmi temple. Pl. XXX, 21.

5. Part or handle of an earthen vessel bearing a grotesquely shaped female votary seated in Indian style with hands joined before the chest. Found in the area east of the Avantisvāmi temple, 5′ below the surface. The fragment is assignable to the 14th or 15th century. Pl. XXX, 24.

6. Upper part (ht. 3″) of a terracotta tablet showing a female figure seated in the same fashion as No. 5. Found at the same place and at the same depth as No. 5, with which it is coeval. Pl. XXX, 22.

7. Fragment (ht. $1\frac{1}{4}''$) of an earthen vessel bearing the crossed legs of a seated figure. Found outside the south-west corner of the Avantisvāmi temple, 6′ below the surface.

8. Bottom (width $2\frac{1}{4}''$) of an earthen bowl bearing on the inside a pair of *garuḍas* facing each other. The fragment was found at the Avantisvāmi temple. Pl. XXX, 20.

9. Fragment (ht. 5″) of hollow earthen pedestal of a terracotta image. The spout, which is well preserved, has the shape of a bull's head from which it may be inferred that the image was a Śaiva one. The fragment was found at the Avantisvāmi temple about 6′ below the surface.

10. Terracotta bird (ht. 2″), found at the Avantisvāmi temple.

11. Broken figure (ht. $2\frac{2}{3}''$) of a quadruped of a rough shape which would seem to have been originally mounted on terracotta wheels. Found in the area east of the Avantisvāmi temple, 6′ below the surface.

12. Roughly shaped figure of a sheep (ht. $1\frac{3}{4}''$) found in the area east of the Avantisvāmi temple, 8′ below the surface.

13. Bust (ht. 3″) of a horse of a late date. Found at the same place as No. 12.

14. Figure (ht. 2″) of a horse with saddle, without head and tail, of no interest.

15. Fragment (ht. $2\frac{1}{2}''$) of a terracotta horse. Found in the courtyard of the Avantisvāmi temple near the floor level.

16. Cylindrical object (length $1\frac{1}{2}''$) of clay, which must have served the purpose of a matrix for stamping ornamental patterns on pottery, etc. Found at the Avantisvāmi temple.

AVANTĪŚVARA TEMPLE.

This temple is situated half a mile below the temple described above, like which it was also buried under earth and débris. The courtyard has now been completely

excavated with the exception of a small portion which has been left undisturbed, in order to facilitate the excavation and repairs of the central shrine. A complete plan of the edifice has not yet been drawn, as the inner plan of the central shrine has yet to be definitely ascertained.

Like the Avantisvāmi temple, this temple consists of a central shrine surrounded by a peristyle, which has entirely perished, except its basement, which is well preserved and is six feet in height. General Cunningham assumed that the recesses of the peristyle were preceded by porticoes supported on pillars similar to those in the Avantisvāmi temple, and he restored the pillars in his plan. This assumption of General Cunningham was mostly wrong ; for we find that there were pillars only on the outside of the west row all the bases of which have survived. On the inside there is absolutely no evidence of any kind of pillars in front of the cells. General Cunningham's plan shows the total number of cells to have been 86. It is difficult to ascertain the correctness of this statement, as there are no traces now left of their foundations except in the west row, which contained twenty recesses besides the gateway.

The gateway to the peristyle is a much smaller and simpler structure than the gateway of the other temple. It consists, as usual, of two chambers, each of which measures 14′ 9″ by 12′ 0″ internally. There are no projecting porticoes on each side of the gateway, as we noticed in connection with the Avantisvāmi temple. The courtyard is not paved. It measures 201′ 6″ east to west, and 173′ 10″ north to south and not 191′ by 171′ as General Cunningham makes it.

The central shrine must have been an imposing structure, but as it has not yet been completely excavated, its precise dimensions cannot be ascertained. The terrace is square, 57′ 4″ along each side, and about 10′ high. Attached to each corner is a platform about sixteen feet square, which must have originally supported a small subsidiary shrine, no traces of which have been preserved. These shrines were built at the same time as the temple itself. From each face of the terrace projects a stair, which must have led to an entrance on each side of the temple. Three of these stairs have been completely excavated. Their flank walls are excellently preserved, but the steps are mostly ruined. They are being repaired as far as possible. The doorways were rectangular with horizontal lintels, preceded by porches with trefoil arches enclosed in pediments. The spandrils of the trefoil arches were adorned with female figures, presumably the river goddesses. The interior of the central shrine is still covered with a heap of large stones, and it is not yet known if any fragments of the image of Avantīśvara-Mahādēva, which was worshipped in this temple, will be found.

When General Cunningham published his plan[1] of this temple, the building was entirely covered with débris, and it is natural that his plan should be faulty and conjectural in many respects. I shall only notice the salient defects. General Cunningham was aware that the temple had four doorways, and the fact that his plan shows only one entrance on the west side and closed niches on the others must have been due to an oversight. Secondly, his plan makes the length of each side of the temple 82½ feet, and relying upon this, he expressed the opinion that this temple must have been 165′ high and the loftiest edifice not only in Kashmir, but in India. In-

[1] J. A. S. B., 1848, Pl. XVII.

reality the length of each side is 57′ 4″ only. What happened was that General Cunningham mistook the basements of the subsidiary shrines referred to above as parts of the same terrace. This, however, is not the case, as the spaces between these platforms and the stairs were originally hollow. The temple has consequently no claim to the great height supposed by General Cunningham.

From the carved blocks of the superstructure that have come to light during the excavation, it is obvious that the central shrine itself must have been largely adorned with sculptures. It is also clear that it was intended to ornament the other parts of the edifice, the gateway and the stairs, etc., similarly. These carvings were however, never completed.

In the way of small antiquities, this temple did not yield much. The most noteworthy find was a collection of 108 copper coins, which were found in a small earthen jar two feet below the surface of the ground to the west of the gateway to the peristyle. Thirty-two of these coins are worn. The rest include twenty-two coins of Tōramāna, one coin of Śaṁkaravarman (883-902), one of Diddā-Kshēmagupta (950-958),seven coins of Diddā (980-1003), three coins of Saṅgrāmarāja (1003-1028), two coins of Ananta (1028-1063), two coins of Kalaśa (1063-89), thirty-four coins of Harsharāja (1089-1101), two coins of Sussala (1112-1120 and 1121-1128), two coins of Jayasiṁhadēva (1128-1149), and one of a king whose name is Vijayasuta-Siṁhadēva General Cunningham published a coin of this last-mentioned ruler.[1] His reign lasted from 1287-1301 A.D. His father was presumably Lakshmadēva or Lakshmaṇa, who preceded him on the throne of Kashmir, though his relationship to that king is not distinctly mentioned by Jōnarāja.[2] But why he is designated as " the son of Vijaya " is not clear. Jōnarāja[3] tells us that Siṁhadēva in a single day bathed Vijayēśvara, *i.e.*, the Mahādēva image of Vijbror with milk worth a lac of gold coins. Is it possible that Siṁhadēva's attachment to that deity gave him that patronymic.

One other small object deserves notice. It is a dish of bell-metal about 10″ wide and 1¾″ deep at the mouth. The upper edge is curved outside. The vessel was found broken into many pieces. There is no writing of any kind incised on it. It was found a few feet below the surface in the courtyard of the temple.

The temples of Avantipura was destroyed at the end of the 14th century A.D. by Sikandar, nicknamed Butshikan. It is obvious, however, that some parts of Avantisvāmi temple were brought into use again at some later date, as two of the cells (Nos. 5 and 6) of its peristyle were found to contain numerous fragments of birch-bark manuscripts of a late date. These manuscripts contain accounts of articles of worship such as oil, *dhūpa*, etc., used in the temple. Another proof of the re-occupation of the temple is afforded by a short Śāradā inscription cut on a large-sized earthen jar which reads *Oṁ mahā śrī Avantivarma-ghata 1583*. The date is presumably referable to the Vikrama era, and should correspond to A.D. 1527. The donor of the jar must have been a pious pilgrim,

[1] *Coins* of *mediaeval India*, Pl. V, 29

[2] Second *Rājataraṅgiṇī*, Bombay Edn., vv. 118-137.

[3] *Ibid* verse 127.

though his name is not recorded. The inscription is the only independent documentary evidence of the connection of Avantivarman with the town and temple of Avantipura.

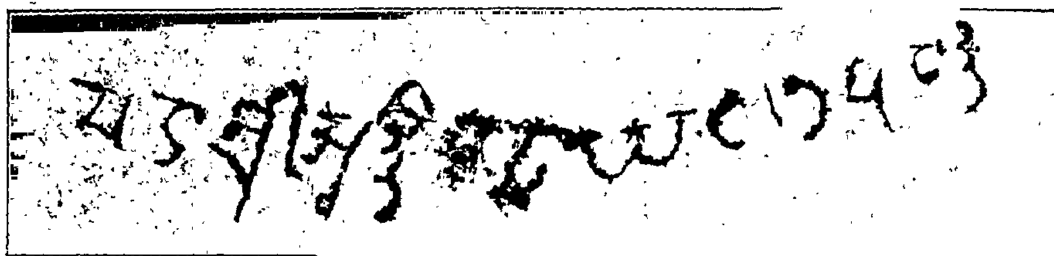


Fig. 1. Avantivarman's inscription.

DAYA RAM SAHNI.

THE STONE SCULPTURES IN THE ANANDA TEMPLE AT PAGAN.

MANY and valuable as are the works on Indian Art which have appeared in recent years, it is a surprising fact that practically no mention is made in any of them of the intimately connected art of Burma. This neglect of so important a branch of the subject is due not so much to geographical consideration as to the fact that no materials, except a few bas-reliefs on terracotta, have yet been made available for the study of Burmese Art.[1] In order to fill this want it is now proposed to publish a series of preliminary studies on the several branches of fine art in Burma, which it is hoped, will help to determine in each case the probable origin of the works discussed, to appraise their artistic value, and to trace out the influences under which they have been evolved. Subsequently, these studies will pave the way for a more complete and comprehensive history of the whole subject—a history which cannot be essayed with any approach to success until the ground has been cleared by systematic spade work of this kind. The present paper is the first of the projected series, and I have chosen the stone sculptures in the Ānanda temple at Pagan not because they come first in chronological sequence (for they are all of the late mediæval period) but because I happened to have at my disposal a set of photographs to illustrate them which I was able to supplement and complete without undue loss of time.

The Ānanda Temple.—The Ānanda temple, in its dazzling garb of white and with its gilt spire glittering in the morning sun, is the first of the great temples to arrest attention and excite the wonder of the visitor as he draws near the ruined city of Pagan, the old Buddhist metropolis of Indo-China. It is situated about two hundred yards outside and to the east of the city walls, which are now rapidly crumbling to decay. As it is the most venerated and the most frequented of all the temples of Pagan, so also it is one of the very few which have been in continuous occupation as places of worship from the day of their erection. The reason of its popularity among the faithful is not far to seek; for apart from its imposing proportions and the beauty of its

[1] See Taw Sein Ko's "The plaques found at the Petleik Pagoda Pagan," *Report of the Archæological Survey, India*, 1905, *pp.* 127 *ff*; Chas. Duroiselle's "Pictorial illustration of the Jātakas in Burma," *ibid*, 1912—1913, *p.* 87. A few Talaing terra-cotta plaques in Temple's "*Antiquities of Rāmaññadesa*" and in "*Bulletin de l'Ecole Française d'Extreme—Orient*," 1911, *pp.* 1 *ff*.

architectural design, it possesses a singular attraction in the stone sculptures,[1] illustrating the career of the Buddha, which ornament one of its corridors, and which vividly recall to the mind of the *devout visitor*, better than any sermon or any book could do, the principal events in the life of the Master. Thanks to its uninterrupted use, tradition and the chronicles have preserved to us in the case of the Ānanda more abundant historical facts than in the case of the majority of the other temples of the same period at Pagan. Many of these facts, it is true, are overgrown by fantastic fables such as emanate only from the exuberant fancy of Oriental nations ; but in this case it is not difficult to sift the true from the false. Moreover, evidence from lithic records, though very meagre, corroborates to a great extent the facts which tradition has handed down in the form of legend or of fable.

Setting aside the stories of divine help given by Śakra, Viśvakarma, the four Mahālokapālas and even Sarasvati in the building of this structure—the history of the Ānanda, reduced to its simplest form, is as follows. Some Buddhist monks, who were Arhats, came from India to Pagan, whether on a visit or to settle there is not certain, though in view of the rapid decline of Buddhism in India at that time and the growing fame of Pagan as a great Buddhist centre, the latter surmise is the more probable. The then king of Pagan, Kyanzittha (1084-1112 A.D.) happened to see them while they were begging for alms and, being struck with their deportment, fed them, and enquired whence they had come. They answered that they came from India, where they lived in a cave on the slopes of the Nandamula Hill. The king then asked them to give him a description and plan of their cave-monastery. This they did, and Kyanzittha struck with admiration for its design, conceived the idea of building a temple which, if not planned on exactly the same lines, would, at any rate, reproduce the general features and arrangments of the Nandamula Cave. And so it was that the splendid Ānanda temple came to be erected.[2]

Written sources as well as tradition agree that it was completed and consecrated in 1090 A.D. There is no epigraph exactly corroborating this date, which is probably based on some contemporary record that has since disappeared. Nor, indeed, has any inscription at all been found in the Ānanda—a fact which is all the more remarkable seeing that Kyanzittha, who erected this famous edifice, appears to have been exceptionally fond of recording contemporary events on stone. On the other hand, it seems likely that the Ānanda Pagoda is referred to in some Talaing inscriptions that were

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[1] Dr. E. Forchhammer, who was the first professor of Pali at the Rangoon Government College, noticed, *in* his too little known Reports the interesting and important stone and rock-cut images of Arakan ; but unfortunately, he merely mentions them, and the photographs he gives of some are very inferior. At Thaton, Vaishnavaite and Mahāyānist sculptures have also been discovered, which most probably antedate the 11th century A.D.; they are among the best I have seen in Burma. Other sculptures again have been found at *Sarekkhettara* or Old Prome, the Mareura of Ptolemy, which are probably the most ancient in Burma excepting perhaps a few from *Arakan*. Sir John Marshall, who has examined them, is of opinion that they belong to the Gupta school, and are not later than about the 6th century. Further excavations will probably bring more to light, in Arakan, Thaton and Prome. It may be noticed here that *Tagaung* mentioned in Ptolemy's Geography and one of the oldest cities in Burma, colonized by Indians from the North, has practically not been explored, and might yield most interesting finds.

[2] There is no reason to doubt the statement as to the coming over of these Buddhist monks from India ; for it is a well established fact that at that period and indeed for at least two centuries previously there was between Pagan and Northern, Central and South-Eastern India, a very active intercourse, both religious and commercial. The Ananda temple itself is a striking witness to this, and the evidence of the sculptures in its corridors is irrefutable.

discovered near Pagan and which record the consecration of a great religious foundation. Following Mr. Blagden's précis of these epigraphs, Mr. Taw Sein Ko writes in his provincial Report for 1912, page 14: "The Talaing epigraphs numbered 1, 2, 6 and 7 record a great function—the consecration and dedication of a great religious building. The function lasted a number of days, and the precise moments of time, when particular objects were treated in particular ways, are carefully recorded by Nadi (and sometimes Pat), occasionally the week-day, *Nakshatra*, *Lagna* and month being also given. Kyanzittha is mentioned by name (Tribhuwanāditya-dhammarājā) as the king, who presides in person over this great ceremonial. He arrives riding on an elephant, and the Brahmin astrologers, Buddhist monks and the rest attend on him and carry out their several duties under his personal supervision. The sacred white elephant (who has a long name beginning with Erawan) is also present, fully caparisoned with every kind of ornamental trappings, which is gilt and adorned with gems of various kinds, and there is also a riding horse with trappings similarly gilt and jewelled. It is noteworthy that, within the precincts of the Ānanda Pagoda, no inscription, either in the Burmese or Talaing character, has been found *in situ*. The ceremonial described in the Talaing epigraphs can refer to no other building but the Ānanda Pagoda at Pagan, whose architectural beauty and collection of sculptures and terra-cotta tablets bearing Talaing legends constitute one of the chief glories of the undivided rule of Kyanzittha over the Burmans of the Upper reaches of the Irrawaddy and the Talaings of the Delta. According to a Burmese oral tradition, when the Ananda Pagoda was completed, Kyanzittha inspected it riding on a white elephant and he had the architect put to death lest any similar edifice should be erected by any of his successors."[1]

In the epigraphs themselves the name of the building which was the object of this great ceremony is not mentioned, but I cannot but agree with Mr. Taw Sein Ko's concluding remarks that the building could be none else but the Ānanda, my reason being that this temple was not only the first and the greatest erected by Kyanzittha after his accession to the throne, but that, of the other great monuments, some had already been consecrated many years before and the rest were built by his successors. While the only other religious foundations of Kyanzittha himself are comparatively small and insignificant and would not call for such an elaborate and magnificent ceremony as here shortly described. Moreover, the fact that Kyanzittha came to the Ānanda on a white elephant to consecrate it is not only, as stated in the above extract, an oral tradition, but is found in the history of the Ānanda written in Burmese, as well as in some old ballads found in palm-leaf manuscripts. Mr. Blagden does not, unfortunately, mention the date of the epigraphs; which would settle definitively the date of this temple. But there are no reasons to doubt the traditional date of 1090 A. D., which, moreover, seems to fit in well with subsequent events recorded in the chronicles, and in the course of which this temple is mentioned. This gives us the approximate date of the sculptures which are described further on.

Several derivations of the name 'Ānanda' have been given. Henry Yule, quoting a note sent him by Colonel Phayre, thinks that the Nandamu or Nandamula, the hill in which was the cave-dwelling of the monks who supplied the plan of the building,

[1] This trait shows well how far the spirit of Buddhism had penetrated the Burmese mind and habits.

is most probably the Nanda-devi peak in the Himalaya regions, and that "the term Ānanda, by which the temple is now known is a corruption arising from the name of Ānandā, the cousin and favourite disciple of Gotama, being so well known to the people."[1] Phayre gives another origin, for the name, deriving it from the Sanskrit *Ananta*, which means 'The Endless', "and which seems to be supported by the fact that another great temple close at hand is called *Thapinyu* "The Omniscient."[2] Both these derivations are plausible; the former particularly so, inasmuch as the monks are said to have come from the Himalaya regions. Moreover, the Ānanda temple is sometimes in contradistinction to another smaller but older edifice, called the "Nandā-Ngnê," the *Small Nandā*; the other, being older, is called the "Nandā-Gyī" or the *Older Nandā*. Originally, however, there may have been no connection between the two, and their distinguishing epithets of 'Small' and 'Elder' may well have been due to the very close similarity of the names Nandā and Ānanda. The other derivation from 'Ananta', recalls at once to mind the famous Ananta Cave in the Udayagiri Hills, in Orissa, and suggest that it may have been from this place that the monks came. The historical legend, it is true, says that they came from the Himalayas, but it adds that they came flying through the air, an accomplishment common to all Arhats, whose abode, when not residing among men, is in the Himalayas, that fairy land of the old Indians. If they came flying, they could not, according to Burmese idea, but have come from there; and being Arhats, they would certainly not employ any other mode of locomotion to cover so great a distance. The Himalayas have probably been pitched upon simply because they are the traditional abode of Arhats and devas and of all fabled beings, and to bring the whole story into harmony with popular preconceived ideas. It is true that the name 'Nandamula' still remains; but is it the Nandadevi peak? The similarity of names is indeed striking; but this very similarity has not seldom, as Orientalists well know, proved a snare; and the equation Nandamula-Nandadevi may be nothing more than a mere guess; a guess which, after all, is not without plausibility, if the legend, and the legend alone, be considered. Moreover, the date when this edifying legend was created and became, in the popular mind, inextricably mixed up with sober historical fact, is not known; but it must have arisen some considerable time after the foundation of the temple, as is always the case in legendary lore. If on the other hand, we examine the monument and, above all, its stone sculptures, the inevitable conclusion forces itself upon us that the strongest influence it betrays comes from Southern, Eastern, Central and Northern India. Orissan influence, though far from being alone yet has left its mark in Pagan; the Ānanda itself bears some signs of it, and its sculptures show no less traces of it. If these influences, preserved to us in stone and brick are taken into consideration, the proposition, that the antetype of the Ānanda temple should be looked for in the Ananta Cave of the Udayagiri Hills, rather than in the remote Himalayas, will not, I think, seem too far-fetched. This does not naturally imply that this temple was built on the plan of the Ananta Cave; this would be a difficult thing to accomplish; but there can be little doubt that the Ānanda and the other temples at Pagan in the same style are imitations of the cave-temples of India; they resemble vast masses of

[1] Yule's "*Mission to the Court of Ava in 1855*," p. 36.
[2] *Ibid.*

bricks in which the corridors, pillars and mysteriously lit recesses of the chapels have been hewn out ; in fact, buildings of this kind are practically considered as caves by the peoples, who often describe them as *kū* (=*gū* from Pāli guhā, a cave) ; and this very word is a member of the compound word which forms the name of some of them.

Sculptures.—The Ānanda stands unique in the whole of Burma for its lavish ornamentation, the most striking feature of which is the crowd of terra-cotta bas-reliefs and stone sculptures. In plan it is a square of about two hundred feet on each side with, on each face, a gabled projecting portico, which gives to the whole the form of a Greek cross. The lower square mass or basement of the building, is surmounted by several terraces successively set back and diminishing, and on the last of which the Śikhara rears itself surmounted by the finial crowned by the hti. The basement as well as the terraces are ornamented with glazed terra-cotta tiles. The plaques of the basement represent the two principal phases of the Buddha's attainment of Omniscience. Drawing an imaginary line in the middle of the building, through the northern and southern entrances, the plaques on the west represent the hosts of Māra assailing the Buddha, and those on the south his glorification by the gods after his victory, each plaque being explained by a short legend in Talaing.[1] The tiles around the next story illustrate the 537 shorter Jātakas, each of which is numbered and the title in Pāli given. But the most interesting, and unique feature which, so far as I am aware, is found only at the Ānanda, is the splendid series of nearly four hundred bas-reliefs illustrating the last Ten Great Jātakas, there being an average of 38 to 40 plaques to each Jātaka story ; each scene is explained by a legend in Talaing of the 11th century.[2] This beautiful collection ornaments the upper terraces. From the basement to the uppermost terrace, the number of these bas-reliefs is 1,472.

The visitor, on entering into this imposing building, might almost fancy himself to be in a cave hewn out of the slope of a hill ; for the sun never penetrates within, and the subdued light skilfully admitted from without strengthens this impression. The interior of the temple is divided by two narrow corridors running parallel to each other and connected by still narrower passages in front of the windows ; it is through these passages that the soft light is admitted ; they are further intersected by other somewhat larger passages to which access is obtained at the projecting porticoes. This intersection of passages and corridors gives the impression that the superstructure rests upon enormous pillars. At the end of these latter four passages, directly opposite each portico, is a niche lighted from above in which is a colossal standing figure about thirty feet in height ; these four figures represent the four Buddhas who have already made their appearance in this *bhadrakalpa*.[3] The enormous pile of bricks in the face of which the niches have been cut occupies the exact centre of the temple and is immediately under the upper terraces supporting the Śikhara.

[1] I hope soon to be able to publish a selection from these plaques.

[2] The decipherment of these interesting plaques has already been begun.

[3] Yule, in his *Mission to the Court of Ava*, in a footnote to page 39, refers to Cunningham's "*The Bhilsa Topes*," p. 191, and remarks that, in the Ānanda as well as in No. 1 Tope at Sāñchi, the Buddha to the north is Sākya Sinha that is, the Buddha Gotama. What may have induced Yule to think so is that the principal entrance to the temple is *now* on the north ; it does not seem to have struck him that this entrance faces directly the village of Pagan, and was naturally chosen by the villagers because it is the most direct and shortest way ; it is also the side of the temple to which one arrives when coming from Nyaung-Ū, where the steamers stop, five miles away. But when the old city of Pagan was at its zenith some seven hundred years ago, it was not the northern but the western

It is in the first corridor, the one formed by the outer and the inner walls, that are found the stone sculptures illustrating the principal events in the Buddha's career until his attainment of the *bodhi*. The side of this corridor further from the central pile of the building and which therefore is the inner face of the outer wall, is divided into two parts by a frieze running all round the building; it is in the space below this frieze that these sculptures are found; they are placed in two rows of niches, forty in each row; the stones have an average height of 3′ 10″ and the figures in the groups sculptured on them vary from three feet to four inches in height, the less important personages being always smaller than the others. The succession of scenes follows the *pradakshiṇā*; the series begins with the request of the gods in the Tushita heaven asking the Bodhisattva to be reborn in his very last existence and to become the Buddha, This is placed at the beginning of the lower row as one enters the temple by the western portico and turns to the left into the first corridor. In this position, the visitor has the sculptures to his left, and the Buddhas in the niches of the central pile to his right; thus getting at first the impression that he is not turning to his right, in the direction of the *pradakshiṇā*, but rather, to his left, in the direction of the *prasavya*.[1] But these are not the only sculptures, for the walls of both corridors are honeycombed with numerous small niches in which are Buddha figures, either seated or standing, in various attitudes. Besides these, in each of the four porticoes are sixteen other sculptures, mostly repeating themselves, but among which are a few interesting scenes, such as the Pālileyya incident, the descent from the Trayastriṁśa heaven, the subjection of the Nālāgiri elephant, *etc.*, which will be explained in their proper place. All these—in the corridors and the porticoes—properly belong to the last existence of the Master. In the small vaulted passages facing the windows and which intersect the two corridors, are also found more stone sculptures, four in each passage; they are smaller than the other, the height of the stones being only one and a half feet. These belong mostly to the *dūrenidāna* cycle and illustrate some of the anterior lives of the Buddha, that is the jātakās. Some of these niches, eighty in number, are empty; others contain a seated or standing Buddha. On the whole, probably not more than about half this number, perhaps even somewhat less, illustrate scenes from the jātakas, for most of the niches are filled with Buddhas. Of those that are left, about fifteen, the majority cannot be identified easily, for they represent personages so very common in those stories—a king and an ascetic, for example, form a frequent group—without anything

gate that was the principal one. The reason for this was that this gate faces not only the old city near by, but also the holy hill, known as the *Tan-Kyi* Hill, on the other side of the river, and on which the Buddha stopped (*tan*) and looked (*Kyi*) towards the spot whereon, many centuries later, the great city was to be built, and gave a prediction to that effect. Sākya Siṁha, the Buddha Gotama, is consequently on the west and not on the north; this is further indicated by the image being flanked by the statues of King Kyanzitthā, the founder of the temple and of the Talaing monk Shin Arahan, the apostle of Southern Buddhism at Pagan; both lived during the dispensation of Gotama, and to have placed them beside a previous Buddha would have been meaningless. These four Buddhas have to be identified by beginning at the north and turning in the manner of the pradakashiṇā: north, Kakusandha; east, Koṇāgamana; south, Kassapa and west, Gotama. The Ānanda is not the only temple in which the principal entrance faces west. About two hundred yards to the north-west of it, are three small temples, about twenty yards apart, in each of which the only Buddha-image at the principal gate faces west; another, near the Mi-ma-laung Kyaung near by, also looks west. It is the same also with another very interesting old temple at Ywāthā, eight miles away from Pagan, and known as the "Chin Paya."

[1] A very interesting paper on this ancient and almost universal practice, with a great many useful references, is found in Goblet d'Alviella's "*Croyances, Rites, Institutions,*" Vol. I, Hiérographie p. 1 *ff*: Roues magiques et circumambulations.

else to help identification, that it is impossible to refer them with any certainty to any particular birth-story. But perhaps the two most important of all these numerous figures, are the likeness, in stone, of King Kyanzittha and of Shin Arahan, a Talaing Buddhist monk, and the great apostle of Upper Burma, who did much to implant and strengthen Hīnayānism of the Mahāvihāra School of Ceylon in Pagan.

The numerous Buddhas, large and small (there are about 1420), which adorn the corridors and passages, are not invested with any special interest; they are all, though in different attitudes, of the same type, and do not call for any particular remarks. But the other sculptures are interesting in some particulars and before describing and explaining them, I shall offer a few general remarks on some of their details.

Technique.—A glance at the accompanying plates will show that these sculptures are late mediæval and that they were executed by Indian artists, possibly imported for this purpose. Mediæval characteristics are clearly stamped on them, and cannot escape even the superficial observer. What strikes one most at first sight is the rigid conventionality apparent in almost all of them. All the personages, excepting a few are cast in the same mould and are standing or seated in a very few conventional attitudes, the iteration of which as one walks along the corridor, becomes monotonous: It is clear that the artists did not display any originality of their own or try and infuse life and naturalness into those stiff and uncompromising actors in the great Buddhist drama; they merely copied conventional forms and attitudes such as they had been familiarized with in India and which had become rigidly stereotyped since the seventh or eighth century. That the sculptors who worked at the Ānanda were of an inferior order and not artists in the higher sense of the word is manifest from their lack of originality and inspiration and from their slavish imitation and endless repetitions as well as from the poorness of their technique. On the other hand they were good copyists and evince a great amount of skill in the details. According to the ancient Indian formula, all the limbs are perfectly smooth, and there is no attempt to represent any of the muscles of the arms and legs; in this they were merely following the conventions of the Schools in which they had been trained, and this does not indicate a real lack of ability in working the details; this will be apparent on examining the elaborate ways of dressing the hair, the head-gear and the ornaments shewn in plates XXXVIII and XXXIX, and the decorative designs of the thrones and temples found in almost every one of these sculptures. The general expression of the countenance is one of dispassionate calmness and impassiveness, but in some figures the delicately formed nose and lips shew a high degree of skilful workmanship, and happily relieve the monotonous uniformity of grave and ascetic expression. It is by thus attending with care to the details that the artists have to a certain degree redeemed their want of originality; but their work is almost entirely devoid of imagination. The principal personages of a scene, such as the Buddha, a Bodhisattva or a king, were in India often represented seated on a cloth or carpet spread over the seat. Our artists naturally were acquainted with this detail (see Plate XXXI, figure 1), but, in their anxiety to introduce decorations everywhere, they spread the carpet where we would the least expect it; for instance (Plate XXXIV, figure 26) under the feet of the Bodhisattva's horses when taking a drive to his pleasance, and of his steed Kanthaka, when riding forth into the moonlight night; again we see the same carpet (Plate

XXXVI, figure 49) in the jungle near Bodh-Gaya, when the Buddha accepts the eight handfuls of grass from the grass-cutter. Another detail of great frequency which shows the lack of artistic discrimination of these sculptors, is the often recurring temple or palace in the back ground of the scenes, principally behind the Buddha. We meet with it in the most extraordinary places ; for example, on the bank of the river Anoma when the Bodhisattva, cuts off his hair, and then throws it into the air (Plate XXXV, figures 37, 38), when Ghaṭikāra brings him the ascetic garb, and when he takes leave of the faithful Chhanna (Plate XXXV, figures 39, 40). A few trees in the background would, in these scenes, have located the events in their proper surrounding ; but the artists do not seem to have thought of this very simple and appropriate device, and the result is an incongruous unreality. But it may also be perhaps that they had in mind, for two of these scenes—the throwing up of the hair and the farewell to Chhanna—the shrines which are said to have been built in commemoration of the events they picture : The Receiving-of-the-hair shrine (Chūḍā-pratigrahaṇa Chaitya), and the Return-of-Chhanna shrine (Chhandakanivartana Chaitya) ; but this is not probable, seeing that they have also placed palaces or temples in other scenes when their presence is in no way needed. The above reflections do not detract from the real worth and merits of these sculptures which, after all, are not much worse than the majority of late mediæval works. That these artists could raise themselves, had they so wished, above the general level of artistic skill displayed in the Ānanda sculptures is evident from the figures in plate XXXI, figure 1, plate XXXII, figure 12, and a few others, but above all, from the two statues, made from the life, of King Kyanzittha, and of the Apostle of Upper Burma, Shin Arahan (Plate XXXVII, figures 57, 58) which will be described further on. These two figures, notably that of the king, evidence no little mastery in the art of statuary.

Description of scenes.—The scenes which are in the corridor are connected solely with the Bodhisattva's progress to supreme Illumination, from the request of the gods in the Tushita heaven to the attainment of the *bodhi* at Bodh-gaya ; the very few scenes illustrating events that took place after the Illumination are found within the porticoes. Unfortunately the corridor in which they are set, is narrow, affording barely room enough for standing the camera at a suitable distance and the stones themselves ensconced in deep and dark niches have been covered with coat after coat of red lacquer paint and gold leaf—all of which makes it singularly difficult to obtain good photos of the sculptures.

When speaking of the lack of imagination of our sculptors, I might have added that it is further evidenced by the frequent repetition of the same scene to illustrate different events. This repetition has enabled me to discard some twenty photographs or more, the reproduction of which would have been superfluous. These discarded scenes will be briefly touched upon in the course of the explanations. The succession of the events is based on the Nidānakathā.[1]

Fig. 1. The request of the gods in the Tushita heaven.—To make the comprehension of the sculptures more easy to the pious visitors, a devout Buddhist had, some ten years ago, a short explanation of each, in Burmese verse, painted on wooden boards which

[1] The preface to the *Jātaka*, Fausboll, Vol. I, *pp.* 47-77. The Nidānakathā has been translated by Rhys David in his "Buddhist Birth Stories."

were placed in the first row above, and in the second row below, the scenes represented. In the main, the events are rightly described ; and indeed it would have been difficult to make a mistake ; for the majority of the pictures speak for themselves. The very first scene, however, has been mistaken by the writer of these explanations. We are told that the principal figure is King Suddhodana, the Buddha's father, seated in his palace at Kapilavastu, and flanked, on his right by Mahāmāyā and on his left by Mahāprajāpatī her sister. This is supposed to be just before Māyā's dream ; but, if this were the case, it would amount to nothing more than a meaningless family scene for the purpose of formally presenting to the visitor the Buddha's father, his mother and his foster-mother just before the Āshaḍhī (P. Asāḷhi) festival. In reality what we have before us is the Bodhisattva Śveta-ketu giving, in the Tushita heaven, his consent to the request of the devas that he should now be reborn on earth and become at last the Buddha. The two figures flanking him represent the innumerable heavenly hosts in the act of presenting their request.

From the position of the Bodhisattva's hands it is evident that he is speaking and granting a request or boon, his right hand being in the *vara-mudrā ;* had he been meditating, he would have been represented in the *dhyāna-mudrā ;* or had he been preaching, in the *dharmachakra* or *vitarka-mudrā*. That the Bodhisattva should have been mistaken for King Śuddhodana is easy to understand, when it is borne in mind that neither the attitude in which he is sitting (*mahārāja-līlā*) nor his dress, give any clue as to his identity ; for both are common to Bodhisattvas, gods and kings, and in fact, as is well known, a king in India, as in Indo-China, was little less than a god in the estimation of the people.

It will be remarked that the personages in their attire, headgear and cast of countenance are altogether Indian ; this is the case with all the other sculptures, and is readily comprehensible, if they were executed by artists from India. Had the Burmese had anything to do with them, the faces would have had a strong Mongolian cast, with high cheek-bones and slanting eyes. The mansion of the Bodhisattva is remarkable ; it is evidently a wooden building, with superimposed roofs curving up at the ends. This style of construction with multiple roofs was, as far as has been ascertained, unknown in Southern, Eastern and Central India ; but it was familiar in Nepal, as well as in Burma. In the latter country monasteries are still built in the same style, and so were the palaces, pavilions and the residences of certain high officials up to the annexation of Upper Burma by the British in 1885. For other characteristic models see plate XXXI, figure 6 ; plate XXXII, figure 16 ; also plate XXXIII, figures 18, 19. Such buildings, as they appear in the Ānanda sculptures, are the only typically Burmese features and were no doubt copied by the sculptors from the models they had before their eyes in the city. This style is seen also in numerous terra-cotta bas-reliefs of the same period (end of 11th century A.D.), illustrating the jātakas, which ornament the terraces of the Maṅgalazedi (Maṅgalachetiya) and Shwe-zigon pagodas as well as the Ānanda temple ; and these were not made by Indians, but by Talaings or by the Burmese[1] under the supervision of the latter. The Siamese copied the Burmese after the 14th century A.D. ; and there are traces of such buildings at Baion, in

[1] See "Pictorial illustration of the Jātakas in Burma" in *Report of the Archæological Survey, India*, for the year 1912-13.

Cambodia as early as the 9th century. Chinese influence is clearly discernible in these wooden edifices, but they were not introduced into Burma directly from China, but more probably by way of Nepal. There are several brick buildings at Pagan in the same style, amongst others a small pagoda near the Shwe-zigon, and the Mi-ma-laung kyaung. This scene properly belongs to the *durenidāna*, for Śvetaketu had not as yet been reincarnated as the Bodhisattva Siddhārtha.

Fig. 2. The dream of Māyādevī.—It will be seen that although the descent of Śvetaketu from the Tushita heaven in the form of a white elephant, is not represented in the Ānanda, the other incidents of Māyādevī's dream which are not represented either at Amarāvatī or in the Gandhāra sculptures, occupy six panels (Nos. 2-7, plate XXXI).

The people of Kapilavastu had yearly a great festival during the month of *Ashaḍha* (June-July), in which Māyā duly participated. On the seventh day she fell asleep and dreamed the dream developed in the panels which follow. The figures in this relief must have been badly damaged ; for, as will be seen on inspection, they have been repaired by some very unskilful hand with cement. The faces of the three figures are now barely human, so badly have they been renovated, and the dress is no longer Indian, but purely Burmese. It covers the lower part of the breast and falls to the feet.[1] The two figures below are female attendants, who appear to be conversing in a room contiguous and opening on to the royal bed-chamber which owing to restricted space, has been placed below the other. It will be remarked that the folds of the Queen's dress are not so badly executed or devoid of taste. The curved lines over Māyā represent the tester or canopy over her couch.

Fig. 3. The four Mahārājas carry the Queen to the Himālayas.—In her sleep Māyā dreams that the four Mahārājas or guardians of the world of men, take her up in her couch, and carry her to the Himālayas and deposit her on the Manosilā[2] plateau, not far from the Anotatta[3] lake, under a large *sal* tree. Owing to the lack of perspective, the arrangement of this scene is not a little awkward ; we should have expected the couch to be, according to the texts, at the foot of the *sal* tree which, be it noted, is very much stylized ; but as a fact, we find it perched near the top, immediately under the branches, with the four Mahārājas standing under it, the intention of the artist being apparently to shew in full the Queen and the four Guardians of the world. The four figures below, in groups of two, are in precisely the same posture. This is the first example of a rigid symmetry which mars many of these sculptures, deprives them of movement and life and renders them monotonous.

Fig. 4. Māyādevī is adorned with celestial garments and flowers.—The four Mahārājas, having placed the couch under the tree, stood respectfully aside ; then came their four queens who in turn took up the couch and carried Māyā to the Anavatapta lake ; where they bathed her and washed away all human stains and impurity.

The Queen is here represented after the bath, dressed in celestial clothes and decked with celestial ornaments by the wives of the four Lokapālas. The lake is indicated in the back ground by two pericarps of the lotus, the seeds of which two parrots

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[1] This style of feminine dress which, being cleft in front, allows the whole of the women's legs to be seen, is now slowly going out of fashion.

[2] Manaḥśilā.

[3] Anavatapta.

are pecking. It will be remarked how well these parrots are executed, especially the one on the left. Indian sculptors were very generally skilful in the representation of animal and vegetable life, and the artists of the Ānanda were no exception to the rule, though too often they mar their work either by carelessness or by a too strict adherance to stylized forms, particularly when trees are concerned. See figures 12, 13, and above all figure 35, Plate XXXV, in which the trees are very well executed. Of animals, three only are represented : the elephant in figure 6, the horse in figures 25, 26 and 33-36 none of which are successful, and monkeys in figure 54.

According to an ancient Indian device, the principal personage in a scene is given a stature and size out of all proportion and keeping with the other actors. This gigantic stature assumes sometimes ridiculous proportions as for example in figure 31, where the horse Kanthaka barely comes up to the knee of the future Buddha ; and in figure 56, where the elephant of Pālileyya is not much higher than the Buddha's ankle. This was a rather crude and inartistic device for drawing attention to the most important figure. In India it was applied mostly to the Buddha or the Bodhisattva ; but in the Ānanda it is used indiscriminately to distinguish whatever personage is, for the moment, the principal one.

The dress of the figures, both men and women, in this scene is well worthy of remark. It is the dress commonly seen on mediæval sculptures in North-Eastern and Central India. In a few figures, as for instance in plates XXVI and XXIX of Rajendralala Mitra's "Buddha Gaya," a light scarf is thrown across the breasts, and sometimes indications of a short and very close fitting bodice are visible ; but as a rule the upper part of the body, from below the navel upwards, is nude, an abundance of ornaments taking the place of clothing for the bust. It is the same with the sculptures of the Ānanda. All the female figures are nude to the navel which is generally well marked. and the breasts are completely uncovered and very developed, as in the mediæval Indian school. This feature may have been due to South Indian influence ; for women in some parts of Southern-India still go about with the breasts exposed.[1] The neck is heavily adorned with necklaces of different patterns, and the upper arm and forearms with armlets and bangles. The lower limbs are clad in a long loin-cloth which reaches to the ankles ; the artists seldom portray any folds or drapery, as those of Gandhāra did with such success ; with the result that the vestment appears to be transparent and the legs bare, the edge of the garment being indicated only by a line at the ankles or by lappets hanging stiffly on the sides of the legs ; or occasionally by both line and the lappets, as in the central figure of the present scene. This loin-cloth is at times so very clinging, that the women, as for example the wives of the four Mahārājas who are dressing Mahāmāyā, seem to be quite nude save for their ornaments. The middle of the body is adorned with an elaborate zone from which depend no less elaborate ornaments. In male figures, the loin-cloth or *dhoti* is as a rule somewhat shorter, often not reaching below the knees, though sometimes it falls to the ankles (*cf.* figure 13), and is on the whole very like those seen at Sāñchī, Amarāvatī, Ajanta, in Orissa and elsewhere. It is the most common dress seen on the terra-cotta bas-reliefs at Pagan. For details of bracelets, armlets, necklaces, breast and waist ornaments, see plates XXXIX. The huge ear-ornaments, which so much distend the lobes of the ears, are

[1] *Cf.* "*Buddhist Art in India,*" *p.* 35.

met with in old Indian sculptures, and seem to have been particularly affected in Southern and South-Eastern India; thence, the custom was adopted by women in Burma, who still retain it; some are shewn on Plate XXXVIII. The fashions of dressing the hair were not many though in some cases elaborate; they are illustrated in plate XXXVIII and are evidently of South-Indian origin; they are also constantly met with in all the terra-cotta plaques at Pagan. Plates XXXVIII and XXXIX exhibit several kinds of headgear, which are very much the same as those found in mediæval sculptures of Central and North-Eastern India.

For general comparison, as to dress, headgear, etc., with the sculptures in the Ānanda temple see: Raj. Mitra's *Antiquities of Orissa,* plates IV, XIX, XXII, XXVI; Mitra's *Buddha Gaya,* plates XX, figures 1 and 4; XXV, XXVIII, XXIX; *Journal of Indian Art and Industry,* Vol. XIII, No. 1020, plate CXLLLL, a Surya from Santal Parganas, Bengal, the original of which is in the Indian Museum at Calcutta; another Surya from Gaur, Bengal, and a large number of mediæval sculptures in the Indian Museum.[1]

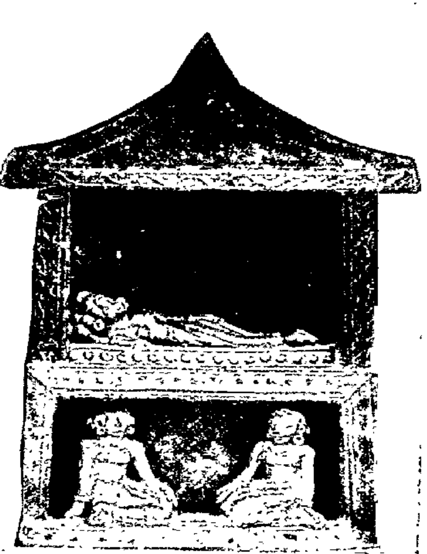
Fig. 5. Māyādevī is anointed with celestial perfumes.—After being bathed, dressed and adorned, the mother of the future Buddha was anointed with divine perfumes. We see her seated on a stone bench with her left hand resting softly on her lap; two of the four Lokapālas' queens, kneeling near her, are dressing her hair in the elaborate fashion, of which details are given on plate XXXVIII, figure 2; they, and Māyā herself, hold in one hand small receptacles containing unguents and perfumes taken from the larger vases held by the other two queens seated below. The latter were made of wood, of which see plate XXXIX. Whether these Burmese vessels were copied from Indian prototypes consisting of a stand, a bowl and a cover, or from those actually in use at Pagan, is not easy to determine; but the Burmese of to-day manufacture and use extensively receptacles such as those delineated on plate XXXIX (except figure 14 and perhaps figure 15) making them of wood heavily lacquered both within and without. The hair of the two queens kneeling near Māyā is tied up in a large knot near the shoulders and falls down far below the waist—a mode of dressing the hair which is not uncommon in Southern and South-Eastern India.

The photograph which follows is omitted here, because the scene represented is an exact duplicate of that in figure 2, plate XXXI; and it has been repaired in the same unskilful manner. This scene represents Mahāmāyā sleeping in the Golden Grotto of the Silver Mountain, not far from the Anavatapta lake, into which the four queens had carried her. As in figure 2, two only of the latter are visible, owing, no doubt, to lack of room.

Fig. 6. The Conception.—Not far from the Silver Mountain was the Golden Mountain. The Bodhisattva in the form of a pure white elephant descended from the Golden Mountain, and coming from the north direction, and holding a white water lily in his trunk, he came to the place where Māyā was slumbering, trumpeted, circled three times round his mother respectfully keeping her to his right, cleaved her right side and thus penetrated into her womb. It must be remembered that all this is, after all, but

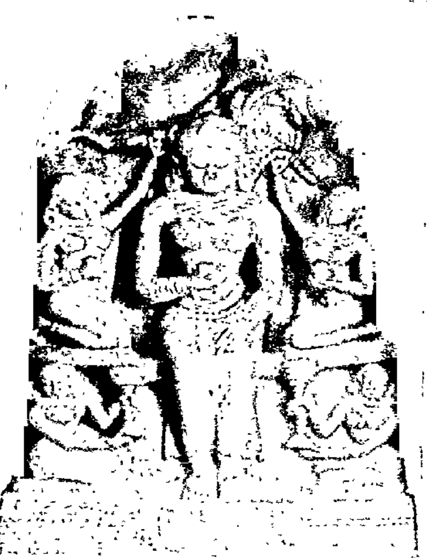
[1] Sir John Marshall, Director-General of Archæology in India, has kindly sent me a set of very interesting mediæval sculptures in the Indian Museum, for comparison.


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a dream, and that in Burma the Conception under the form of a white elephant. has never been conceived or thought of as a reality: the case might perhaps have been different, for the Burmese are an imaginative people and prone to the miraculous. had not the *Nidānakathā*, the standard life of the Buddha in Pāli, been particularly clear and explicit on this point.[1] This probably explains why in this scene Mahāmāyā is seen sleeping in her own bed room in the palace. and not in the wondrous grotto of the Himalayas. It is thus also that the Gandhāran artists represented her. The canopy over her bed is indicated by two faint curved lines. Her girdle here has been omitted and owing to the fashion—which recalls that of the Gupta period—of indicating the loin-cloth only by a line near the feet, she seems to be perfectly nude; but this omission must be due to forgetfulness, for in figure 3, Māyā has her zone. If the allegory of the dream has been adhered to, the four females in the side-room below, are the wives of the four Guardians of the world; but I incline to think that they are merely four attendants watching over the Queen's slumber in the palace; for the four queens, whenever represented (figures 4, 5), have no chignon as the women here have, their hair being simlpy knotted and falling between the shoulders. Māyā is lying on her right side,. and in this the artists have followed the tradition of the old sculptors of Sāñchi and Bharhut. According to the orthodox story Māyā was lying on her left side and this is the Gandhāran artists rightly understood, for they always portray her sleeping on her left side, and presenting her right side to the elephant. In conformity with the practice of exaggerating the size of the principal figure we should have expected the elephant to be unduly large, as we see him in fact in the same scene at Sāñchī and Bharhut. As a fact he is as in the Gandhāra reliefs of a diminutive size; and seated on the floor at the side of the bed, near its head, with his two forelegs raised in the act of creeping up and entering his mother's right side. It is here that the awkwardness of making Māyā recline on her right side is apparent. But was it after all really a mistake on the part of the old sculptors, and did they not purposely represent her so? It was the belief in ancient India, that exalted persons always slept on the right[2] and never on the left side: for example the Buddha, the arhats, and those highly devout persons whose mind was free from the grosser passions, and if we are to believe the texts, Queen Māyā was a very exalted person, not only from the wordly point of view of position and power, but also spiritually, and after her dream and conception, her mind was absolutely free from all low and carnal desires.[3] It may have been due to this current idea of the peculiar sanctity attached to lying on the right side, that the old Indian artists represented Māyā thus, notwithstanding the awkwardness of the position in this particular scene. The artists of Gandhāra may not have been acquainted with this time-honoured Indian idea as to the most dignified and exalted manner of

[1] *Jātaka*, Vol. I, *p.* 50. All the biographies of the Buddha in Burmese naturally have the Nidānakathā as their principal basis, filling up from aṭṭhakathās, ṭīkās and other Pali works; they are all very explicit as to the whole occurrence being but a dream. *Cf.*, for instance, the Jinatthapakāsanī Kyam—the standard life in Burmese, *p.* 8.

[2] Anguttara Nikāya, 1, 114; Dīgha Nikāya, 11, 134; the gloss on the latter, Sutta-Mahīvagga Aṭṭhakathā, enumerates three ways of lying down: i, on the right side (sīhaseyyā); ii, on the left (kāmabhogiseyyā) which was resorted to by persons addicted to carnal pleasures; and iii, on the back (petaseyyā), the usual way of sleeping of ghosts or demons owing, it is said, to their extreme thinness. Also the Burmese works, Jinatthapakāsani 621, and Mālālankāra Vatthu, 305.

[3] Nidānakathā, 51.

sleeping; or if they were aware of it, they were not men to sacrifice artistic effect and reason to such a notion.

The above possible explanation is offered merely for what it may be worth.

Fig. 7. Māyā relates her dream to the King.—The day after the conception, Mahāmāyā goes to the King and relates her dream to him.

Śuddhodana, in full regal dress is seated on a throne, with the white umbrella, emblem of royalty, above his head; the halo behind his head will be remarked, the more so, as it is out of place here. The artists do not seem at all particular about the use of the nimbus; they sometimes place it, as here, where it is in reality not needed, and on the other hand omit it where they should have put it in; or, again, place it wrongly, as for instance, in figure 46, in plate XXXVI, where it is the deva instead of the Bodhisattva who is adorned with it. In the terra-cotta plaques at Pagan, the same thing happens with the umbrella, which is used to designate the being who shall be the Buddha; but not infrequently, it is placed over the wrong person. On the King's proper right is seen Māyā with folded hands, relating her wondrous experience; to his left is a female attendant with a fan; below four other females attend on the King with betel, *etc.*, in vases in their midst; the last on the right is holding what appears to be a fan.

Fig. 8. The four Mahārājas guard Māyādevī.—During the time of gestation, the four great guardians of the world, sword in hand, were constantly mounting guard near the Queen, to protect her and the child from any possible accident. Queen Māyā is in a rather stiff attitude, seated on a throne, with all her ornaments, and her feet resting on lotus pedestal. The lotus is probably a device symbolizing the divine child reposing in her bosom, and perhaps the nimbus around her head serves the same purpose. The wood-carving on the top is of the pattern still very commonly found at the present day in wooden monasteries and imitated in plaster in small religious edifices.

It will be seen here that the sculptors do not rigorously follow the *Nidānakathā*; for, immediately after the scene where she relates her dream, should have come the Interpretation of the Dream, which took place on the morrow of the conception. For the prophecy of Kāladevala see figure 17, and for the horoscope of the Brahmins and prediction of Kauṇḍinya, five days after the birth, figure 18.

Fig. 9. Māyādevī begs leave to visit her parents.—When the time of her confinement drew nigh, Queen Māyā feeling strong desire to visit her parents at Devadaha, communicated her wish to her royal husband who immediately granted her request. Māyā is kneeling in an attitude of supplication before the King on his throne; below, on the floor the usual four female attendants. The coiffure of the Queen is that still in fashion in Southern India.

Fig. 10. Māyādevī sets out on her journey.—King Śuddhodana immediately had the route from Kapilavastu to Devadaha beautifully decorated; and sent his queen to her parents. Māyā is seen here on a litter carried by sixteen men, of whom only the eight on the near side are visible; behind her an attendant holds an umbrella over her head. The details of her head-dress and of her ear-ornament are given in figure 2, plate XXXIX. The ear-ornament may be compared with the one shewn in figure 122, plate XXVII of Mitra's *Antiquities of Orissa*.

Fig. 12. The Birth of the Bodhisattva.—Between the two cities is a magnificent Sal (Shorea Robusta) park, known as the Lumbini (Rummindei) Park. As she approached it, the trees put forth beautiful flowers, and legions of birds of every hue sang joyously among the branches. Seeing the beauty of the park, Queen Māyā felt a desire to enter it. She was carried there to the foot of a large tree and raised her right hand to grasp one of the branches. The branch bent down of its own accord, and, even as she held it, she was delivered of the child in a standing position. In the Gandhāran sculptures, the birth and the incidents that immediately follow are depicted in four scenes: (*a*) as the child is born, the god Indra receives him in swaddling-clothes (Foucher, *Art gréco-bouddhique*, figure 152); (*b*) again the child is seen already born, and being received by Indra and making his first seven steps (*ibid*, figure 154); (*c*) making the seven steps flanked by Brahmā and Indra (*ibid*, figure 155); and (*d*) receiving his bath (*ibid*, figure 156). In the corridor of the Ānanda, the sculptors have preferred to spread all these incidents over seven scenes (figures 12 to 18 in the corridor; nos. 14, 15, 17 are not reproduced); but in two of the sculptures from the porticoes (figure 12), everything is depicted in a single scene; moreover, in the corridor, the bath is altogether omitted. In figure 12 will readily be recognized the nativity as conceived in Gandhāra, whence it spread over India, Indo-China and Java. In figure 12 the two central figures are in a very graceful attitude and among the best sculptures of the corridor. Māyā's right hand is stretched out, holding the *sāl* branch; with her left she embraces her sister Mahāprajāpatī, who supports her. It will be remarked how the stature of the several personages follow the scale of their importance; Māyā is taller by a head than her sister, and the latter is, in turn, much taller than the female attendant who, on the right, holds a fly-flap in one hand and in the other the vase of lustral water. According to the tradition, the child is seen issuing from the right side of his mother; but while in India, he emerges in a seemingly natural and easy manner, in our sculpture he is in an extraordinary attitude for a new-born babe, being seated with his legs curled up under him, *yogi* fashion, and with his hands in the teaching, or *dharmachakra-mudrā;* this goes directly against the *Nidānakathā* (page 53), which states that he came out from his mother's side with hands and feet stretched out: *dve cha hatthe dve cha pāde ṭhitako.....nikkhami.* In this scene Māyā is usually represented in a very graceful attitude, standing, with one leg crossing the other in an easy and comely manner; but here, she is represented standing in the ordinary way. With this representation may be compared that at Angkor, in which her legs are in the same position.[1]

The two following photographs are not from the corridor, but from the porticoes, of the Ānanda. They are interesting in that most of the events immediately connected with the nativity are grouped in the same stele.

In figure 11A (not reproduced), the artists have, I think, made a mistake in the respective attitude of the two sisters: Mahāprajāpatī with her right leg crossing the other, is in the position which tradition attributes to Māyā and not to her. On the right is a female attendant with a fly-flap in the left hand; with her right hand, stretched out, she gives a vase of lustral water to Mahāprajāpatī. In figure 12, this attendant is much more distinct, and she has usurped the attitude which rightly belongs to Queen Māyā in the nativity. It is but natural that lustral water should have been at hand on

[1] Compare also fig. 3, pl. X in Foucher's "*Iconographie Bouddhique.*"

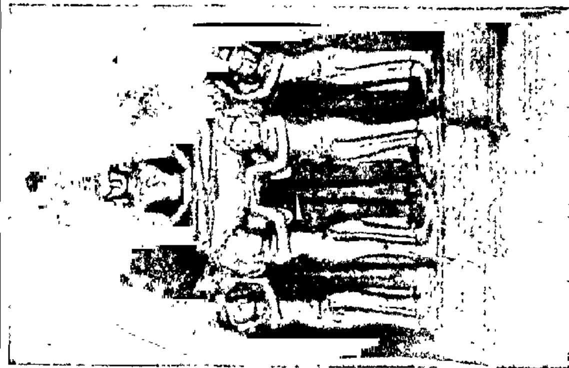
this occasion, but considering it is also brought by a *deva* on the other side, that offered by the attendant becomes superfluous. Here, the *Nidānakathā* is strictly followed. As soon as the child is born, he is received by four Mahābrahmas in a golden net; no part is taken by Indra, as in the Gandhāra sculptures. The sculptor was apparently hampered by the size of the stele and the number of scenes and persons he had to represent on it, which explains the smallness of the figures on the proper right. Of the four Mahābrahmas only two are visible, the other two being concealed behind them; they are easily recognizable by their triple head. They have just received the child (in the *dharmachakra-mudrā*) and are holding him. As he is in their hands, the artist has, quite rightly, not thought it necessary to represent him issuing from his mother's side; but the author of the next stele (figure 12), has evidently thought otherwise; for there we see him gliding down on to the Mahābrahmas' hands. It was then that two streams of water came down from the sky and washed mother and child, although the latter was born undefiled. This is symbolized in both representations by a deva coming down from the heaven and holding in his hands a vase of water which was probably for our artists the simplest way of indicating the celestial origin of the lustral water. This figure, though not intended to represent them, calls to mind the Nāga kings Nanda and Upananda of the *Lalita Vistara*. Below the Mahābrahmas are two figures representing the four Mahārājās receiving the child in a soft antelope's skin from the hands of the former; below these again are seen two men receiving the Bodhisattva on a soft piece of cloth. Between them and Māyā the child is seen standing on the ground; this represents him as, after leaving the hands of the men, he stood, facing the east and the other quarters, and then made his first seven steps.

In the corridor, as already said above, each of the incidents here described is pictured on a different slab. This method recalls that of the Greco-Buddhist school while that followed in the two slabs of the porticoes, recalls rather the device of the old Indian school of bringing together several scenes on one panel.

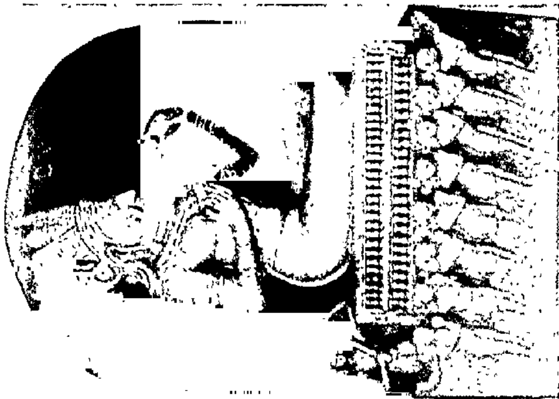
Fig. 13. The four Mahābrahmas receive the child.—This photograph and the two follow, numbered in the corridor 13, 14 and 15 respectively, depict the Bodhisattva being received after his birth by the Mahābrahmas, the four Mahālokapālas and men, as has just been explained. These scenes are so very much alike that the two last have not been inserted in the plate. In the present scene three heads of each of the four Brahmas are visible. The simplicity of their dress is remarkable; they have no ornaments beyond large ear-drops; the bust is completely naked and the loin-cloth is quite plain. The Bodhisattva is in the attitude of the *dhyāna-mudrā*, his two hands resting one upon the other, palms upwards, in his lap. Behind him are three trees very much stylized, the trunks of which can be seen between the Mahābrahmas, representing the Lumbini Park.

As before stated, the scene of the bath which, according to the *Nidānakathā* should come immediately after the present scene, has been omitted in the sculptures of the corridor.

Fig. 14. The child stands and faces the east.—As soon as the child was transferred from the black antelope's skin of the four Guardians of the universe on to the fine cloth of the human beings he escaped from the latter's hands and stood on the ground.


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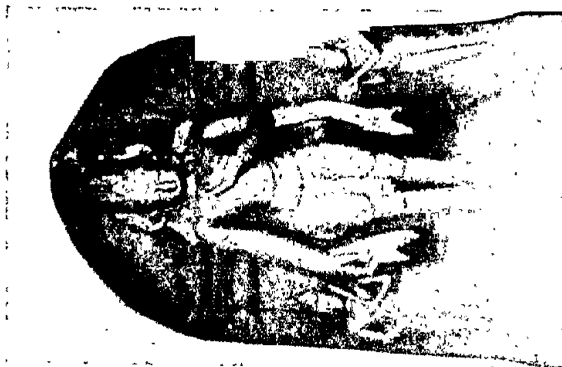

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looking towards the east. Thousands of spheres lay open in front of him as a great vista. and the gods and men in those spheres praised him ; saying " None is greater than thee in this world."

Although this took place in the Lumbini Park, the sculptor has placed the child at the entrance to a mansion or temple, where he appears almost taller than the building itself. To his right is the Brahmā *Chatur-mukhaḥ* holding an umbrella over his head ; to his left, Śakra, distinguished from Brahmā by his tiara, holds his conch. This is the first time we have intimation that Śakra assisted at the birth, although, in the Gandhāra sculptures he is practically the principal personage at this great event. In the *Nidānakathā* he does not figure at all in this scene, his place being taken by the god Suyāma.

Fig. 15. The first seven steps.—Then, the child faced the other cardinal points and not perceiving his equal,[1] he walked seven paces flanked by Brahmā holding the white umbrella on his right and by the god Suyāma holding a fly-flap on his left ; at the seventh step, he stopped and, facing north exclaimed : " The chief am I in the world, the most excellent and the greatest !"

Fig. 16. The child at Kapilavastu.—Soon after his birth the child and his mother were taken back to Kapilavastu by the inhabitants of this city and those of Devahrada.

The scene of the " return from the Lumbini Park " is not represented at the Ānanda ; had it been, considering the inclination of the artists to make the same scene do for several events, it is probable, we should have had again something very much like figure 10, the child being substituted for his mother. We see here the child after the return from Lumbini, in his room at the palace in Kapilavastu ; he is in the teaching attitude, and appears to be delivering a discourse to his mother, who is on his right, and his aunt Mahāprajāpatī on his left ; these two ladies of highest rank are distinguished from the attendants below by their head-gear, details of which are given in figure 14, plate XXXVIII. Four gods, who no doubt stand for a whole host are in the air, in a flying posture, near the Bodhisattva and are listening reverently to the sermon ; the fact that they are in the air being indicated by wavy lines under them representing clouds. These flying figures are interesting, for they show a decided South-Indian influence. This kind of figure was unknown in the earliest period of Indian art, but it became quite common at Amarāvatī, and later on spread over Southern India and thence into Burma and the adjacent countries. On the other hand, as previously stated the style of house or temple seen here is Nepalese modified by Chinese influence ; such buildings must have been common enough at Pagan at that time.

The reader will perceive that, in this sculpture, the child-Bodhisattva, the only person who should properly have a nimbus, is without it, while those inferior to him, the gods and the two queens, are each provided with a nimbus, although strictly speaking they ought not to have it.

Fig. 17. The visit of Kāladevala.—Now in the Trayastriṁśa heaven, the hosts of devas rejoiced and sported waving their turbans and saying " In the city of Kapilavastu, a son has been born unto king Śuddhodana ; one day, sitting upon

[1] There is a sculpture representing this inspection of the four quarters, but as it is in every way identical with the one reproduced here shewing the seven steps, it has not been included in the plates.

the Throne of Wisdom, he will become a Buddha." The ascetic Kālā-devala, who was endowed with super-human powers, and the spiritual adviser of Śuddhodana, after his meal, repaired to the Trayastriṁśa heaven and was not a little astonished to perceive the gods delirious with joy. Having learnt the reason, he went straightway to Kapilavastu and asked the king to shew him the child. The king ordered the child to be brought, took him and held him towards the hermit so that he might salute the holy man; but the child, than whom none was greater, turned up his feet and placed them on the ascetic's head. Kāladevala understood, rose from his seat and saluted the future Buddha by bringing his joined hands to his forehead. The king, seeing this marvel, himself did reverence to his son. It was then that the hermit predicted that the child would become the Buddha.

The hermit is readily recognized by his emaciated state, evidenced by his sunken stomach, though otherwise his limbs are plump enough. How different in treatment from the Ascetic Gautama of the Gandhāran school whose emaciation is so poignantly shewn.[1] The beard and still more the hair, are also typical of the Brahman ascetic, the latter being tied up in two knots, one on each side of the head, which have at first sight the appearance of horns. This is an old way for ascetics to arrange their hair and it must have been common already before the 5th century A.D.; for, according to Grünwedel,[2] it is mentioned in a gloss on the name Isisinga, in the Alambusa-jātaka,[3] where it is said that the hermit was so called because " on his head there were two top-knots resembling the horns of an antelope." This coiffure is still met with among Indian ascetics, and it was known also in Cambodia, where a hermit with his hair tied up in this fashion is represented on a bas-relief at Angkor-vat.[4] Śuddhodana is in full regal dress, wrapped almost completely in a mantle: and in this scene one is astonished to see him with moustache and ascetic beard, whereas in the next figure, No. 18, as well as in figures 7 and 9, he is represented without any hair on the face. In these cases it looks as if the hair was added later by some repairer; but if this was so, the addition is a very clever one.

Fig. 18. The Horoscope.—Five days after the birth, the child was, according to custom, given a name—that of Siddhārtha (P. Siddhattha). On this occasion, 108 Brahmins had been invited to attend the ceremony, eight among whom were especially clever in the art of predicting the future from the signs of the body. Having carefully examined those signs, seven of them came to the conclusion that, if the child remained in the world, he would become a universal monarch; and that, if he left it, he would become the Buddha. The Youngest, Kauṇḍinya (Kondañña), who became afterwards one of the Master's greatest disciples, asserted that, of the two alternatives, the second would prove true, and that the child would certainly become the Buddha.

Śuddhodana, on his throne, is holding in his hands the young prince Siddhārtha, who seems to take an interest in what is going on. On the king's right is Mahāmāyā, on his left, Mahāprajāpatī. The four figures below represent the Brahmin fortune-tellers foretelling the future of the prince. From what we are accustomed to in Indian sculptures, we should have expected them to be bearded. The two on the proper right

[1] See the photograph, page 67 of D.B. Spooner's *Handbook of the sculptures in the Peshawar Museum*, 1910.
[2] *Glasuren aus Pagan, p. 7.*
[3] Fausböll, Vol. V, p. 153
[4] See Delaporte's "*l'Architecture Khmer*" *p.* 226.

have their right hands raised before their breast, palm outwards, as if in the act of conversing; the two middle fingers of the left hand are closed, and the index and little finger open thus symbolizing the two alternatives that the child would either be the Buddha or a universal monarch. Those on the other side have their left hands placed on the breast, in the act of making a decided statement, in this case to the effect that the child could only become the Buddha, while the fingers of their right hands are all open, as if rejecting a statement. These two figures represent the other opinion, although, as a matter of fact, only one, Kauṇḍinya, gave it as his own. But had he alone been represented in this attitude the symmetry of the scene would have suffered.

Fig. 19. Siddhārtha's infancy.—The scene depicted in this figure is not easy to identify because there is nothing particular to give a clue to its meaning. It is true, the short legend in Burmese verse above the slab informs us that it depicts king Śuddhodana just before the Ploughing Festival, when, having passed in review his four-fold army, he awaited the beginning of the ceremony in the field. But I am rather inclined to think that this scene is intended merely to represent, in a general way, the first few weeks of the infancy of the young prince in the palace, surrounded by innumerable nurses and female attendants. The lotus cushion on which he is sitting, and the lotus flower on which his right foot is resting, indicate that he is none other than the Bodhisattva. The woman on his proper left holds something indistinct, which appears to be a bud, perhaps a lotus. It may also very well be that this sculpture is not in its original place. Had it come after figure 21, it could have been more readily understood, and would represent, as it no doubt does, the boyhood of the prince.

Figs. 20 and 21. The Ploughing Festival.—Some time after the birth of the child, king Śuddhodana, according to an immemorial custom, went out in great pomp to celebrate the Ploughing Festival. In the field where the ceremony was to take place, was a large rose-apple tree (*Jambu*), with thick, magnificent foliage. Under this tree the king had a bed prepared for his son covered over with a canopy studded with golden stars and surrounded by rich cloth. Guardians were set to watch and the king went to open the ceremony. The nurses, anxious to see the festival, left the child, who, looking around and seeing no one, sat up on his bed with his legs crossed under him and his hands in his lap, and entered, for the first time, into a profound meditation. The nurses were a long time away and the shadows of the other trees had shifted round, but that of the *jambu* remained stationary. The nurses returning and beholding this wonder and perceiving the child meditating on his bed, informed the king of the miracle. The latter came in haste and prostrated himself before his child. This was the second time that Śuddhodana reverenced his son.

All authorities do not agree as to the time when this first meditation of the Bodhisattva took place. The northern sources generally place it late, when he is an adolescent or even an adult. The *Mahāvastu*, (ii, 45), however, places it, like the *Nidānakathā*, soon after the prediction of Kāladevala; but while in the *Nidānakathā* the child is still a babe, in the *Mahāvastu* he is a boy roaming about the garden. The *Jinatthapakāsani* (p. 15) on the other hand places it when the child is a month old, but does not give any reference. Spence Hardy (Manual of Buddhism, 150) says the wonder took place five months after the birth. Our sculptures follow, of course, the

Pali tradition. They have divided the event into two scenes. In the first (figure 20), the child is represented lying on his bed, with eight nurses attending on him. No attempt has been made to indicate either the canopy or the cloth surrounding the couch. The infant is already lying down as all eminent persons do, that is, on his right side, with his head resting on the palm of his hand (see p. 35); the rose-apple tree is seen inclining somewhat on the right; and the nurses have not yet left him. In the second scene, figure 21, the nurses have come back and informed the king of the two miracles: the motionless shadow and the meditating babe. We see Śuddhodana on the right of his son, prostrated in adoration. Here also, his face has been retouched and he has again been given an ascetic beard. The female on the left of the child is his foster mother Mahāprajāpatī; for Mahāmāyā, we are told, had died seven days after the birth. The child is no longer on his bed, as he should be but on a throne with a nimbus surrounding his head. Behind is the *jambu* tree, the branches falling on both sides of the future Buddha, to show the miracle of the shadow. An interesting fact to be noticed in these sculptures is, that the place of honour was always on the right; in Gandhāra it was on the left.

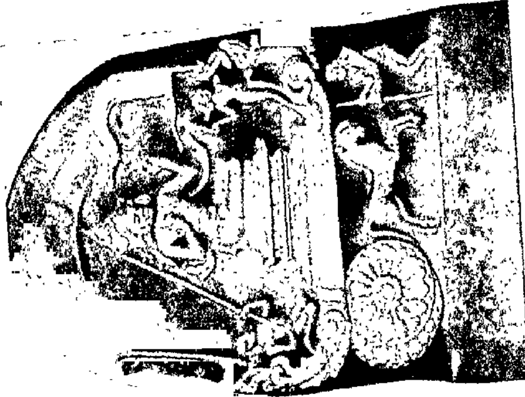
Fig. 22. The adolescence of Prince Siddhārtha.—The southern tradition passes over the incidents of the boyhood; and that is why the scenes at school are not represented here. Immediately after the first meditation at the Ploughing Festival, the *Nidānakathā* (p. 58) tells us that the Bodhisattva grew and in due course attained the age of sixteen. His father built for him three palaces in each of which to pass one of the three seasons of the year: the hot season, the rainy season and the winter, one having five storeys, the second seven and the third nine.[1] The Bodhisattva resided therein in great splendour and wordly enjoyment, surrounded by thousands of fair damsels and dancing girls.

Our artists, no doubt anxious to impress on the mind of the devout onlooker the sublime abnegation and self-sacrifice of the Bodhisattva when, some years later, he abandoned without regret his worldly pleasures and power, have represented the three multiple-storied palaces, with the prince surrounded by beautiful young women; but as usual, they have shown a curious lack of imagination; for these three sculptures—numbered in the corridor, 25, 26 and 27—are practically the same; the number of storeys in each palace, that is, 5, 7 and 9 alone being scrupulously adhered to. Accordingly, I have chosen for reproduction only the slab depicting the seven-storied palace, as being fairly representative of this kind of structure, still so common all over Burma. Here the Prince Siddhārtha is represented in conversation with two ladies of the palace, who are seated on what is intended to represent the floor of the room, each with one hand raised and the other on the breast. On the prince's right, an attendant presents him with betel in a lacquered box, and on the other side another holds a fly-flap. Siddhārtha himself is seated on a lotus cushion, with a nimbus, and over his head, a white umbrella, symbol of royalty; for, according to the *Nidānakathā*, he had just been married to the princess Yaśodharā, the daughter of Suprabuddha, King of Koli, and according to the Burmese work, *Tathāgata-Udānaṁ*, which Bishop

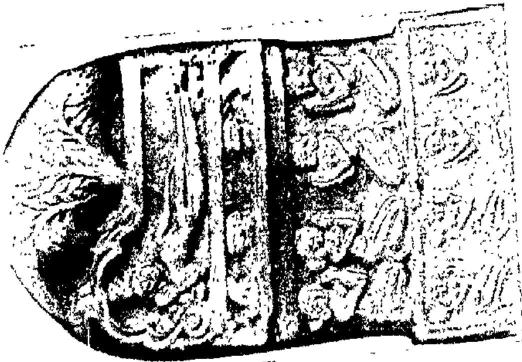
[1] The magnificence of these palaces is described in glowing terms and with great wealth of imagery in the Jinacharita verses 128-132. The Jinatthapakāsanī has an interesting note to the effect that the storeys were not habitable; that is, they were formed of superposed roofs merely; the author must have been influenced by what he saw in Burma.



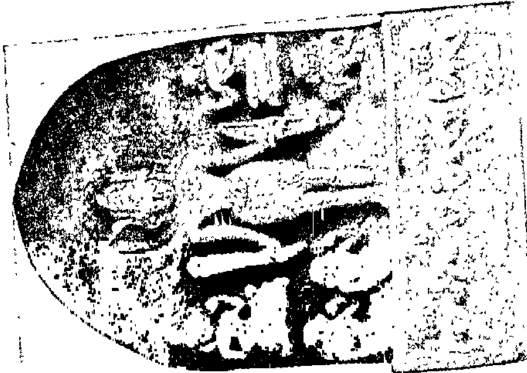
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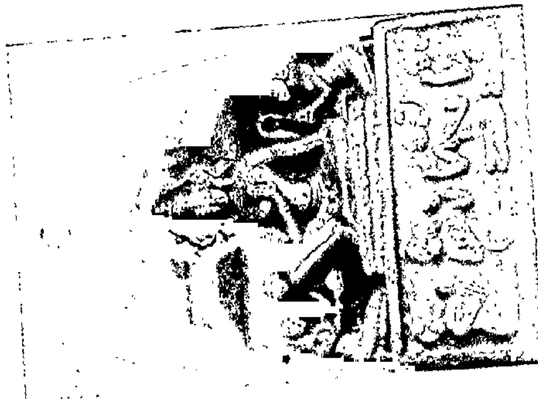
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Bigandet follows, had, at the same time, been consecrated Crown Prince. Technical difficulties prevented the sculptor from placing the prince in the palace and shewing at the same time the seven storeys of the latter ; and accordingly the palace is merely indicated behind him.

Fig. 23. Siddhārtha is prepared for the athletic match.—According to the *Nidānakathā* (p. 58), the athletic sports which took place about this time, have no connection with the young prince's marriage, which had taken place some time before.[1] But it is related that the influential Śakyas, discontented at seeing young Siddhārtha lead a life of effeminacy in his harem, murmured, saying that, in case of war, it would go hard with him, for he did not train himself in any of the arts of which a young prince should be master. On his being told this by his father, the Bodhisattva answered that he needed no training and that on the seventh day thereafter he would show the Sakyas what he could do, and so set their minds at rest.

Fig. 23 shews us the Bodhisattva being prepared for the great athletic contest. That this is really the scene intended to be depicted can be deduced only from the position of the sculpture which intervenes between the scene of his life of enjoyment in his palace and that of the actual contest; for there is nothing distinctive about it, and taken from its position and examined by itself, it would be difficult to identify. The *Jinatthapakāsanī* (pp. 18-19) tells us that before entering the arena, he was accoutred in armour of priceless value. Nothing of the kind, however, is seen in the sculpture, in which he is represented wearing the common, short dhoti, a more likely costume for sports, and one which recalls the Gandhāran scenes, in which he is shewn similarly dressed on this occasion.[2] The attendant on the proper left holds a casket containing either articles of dress, or, perhaps more probably, betel ; the one on the other side has a fan. By some strange oversight—not rare in the Ānanda—these two attendants have a nimbus like the future Buddha.

Fig. 24. The Athletic contest.—On the day appointed, prince Siddhārtha proves to the Śakyas, by wonderful feats of archery and divers arms, and by a marvellous display of strength, his ability and mastership in those arts of which he had been reproached for his supposed ignorance. Here the sculptors had a splendid opportunity of showing their technical skill and ingenuity by depicting in a striking fashion the several phases of this homeric contest:—the shooting of the unerring arrows, the extraordinary elephant and horse riding and the like.[3] Instead of this, we have a very tame and spiritless scene. The Bodhisattva is standing stiffly, adorned with an elaborate head dress, and holding in one hand the terrible bow which none but himself could string ; and in the other a sword. Everything about him is lifeless and conventional. On his right is his father Śuddhodana with a nimbus ; on his left, another

[1] The Tathāgata-Udānaṁ, cited in the explanation of the preceding figure, follows in this the Nidānakathā ; it is interesting to remark that the Jinatthapakāsanī connects the sports directly with the marriage, as does Spence Hardy, p. 152 of his "*Manual of Buddhism.*" But these two versions are slightly different ; in Hardy, Suddhodana first asks Suprabuddha for his daughter Yaśodharā in marriage for his son ; Suprabuddha finds him effeminate. hence the athletic contest. In the Jinatthapakāsanī, Suddhodana sends an order to all the chiefs to send their daughters for the prince to choose ; they refuse, objecting to his effeminacy ; then, the match takes place and Siddhārtha is easily first; all the damsels are brought and he chooses Bhaddakañchanā, a daughter of Suprabuddha, to whom he gives the name of Yaśodharā Bimbā-devī.

[2] *Cf.* "*Art Gréco-bouddhique,*" Vol. 1, figs. 170, 171, 172.

[3] See Jinatthapakāsanī, pp. 19, 21.

figure in exactly the same position, who, I venture to think is Yaśodharā. Although nothing differentiates her from the seven spectators, who are in the same position as the two uppermost figures. Thus out of the ten personages in this scene nine are in identically the same posture, producing most monotonous effect.

Figs. 25 and 26. The Four Omens.—The four omens which appeared to the prince and shattered his father's hopes of seeing a universal monarch in his family, are represented in the Ānanda by four scenes, or rather by one scene repeated four times. This was perhaps unavoidable, as, on all four occasions the prince was in his chariot with his charioteer, and both of them with the chariot, had to appear in each scene. Thus the sculptures numbered 30-33 in the corridor are in all respect the same, except as regards the omens themselves, and even this is true only of the last two, for the two first, an old man and a sick man, are exact replicas of one another. For this reason only two scenes have been chosen for reproduction; namely the second and the third. The only attempt to remedy the monotony of these scenes has been by modifying slightly the attitude of the charioteer and that of the umbrella-bearer.

The first omen (see figure 25, to which it is similar) was that of a very old man whom the Bodhisattva perceived on his way to his pleasance, when escorted by a great retinue. None but the prince and the charioteer saw him, for he was no mortal, but a deva, who had assumed this appearance.

In figure 25, we see the Bodhisattva meeting with a sick old man who is helping himself along with a stick. Never before had the Bodhisattva seen a sick person for, to keep such objects from his sight, the king his father (knowing they would induce him to adopt the life of a recluse), had from the time of the horoscope, when the baby was but a few days old, posted numerous guards all round the palace to prevent such persons coming near it. On learning from his charioteer what this person was, and that he too might any day become sick, the Bodhisattva felt a great disgust for the world and turned back dejected to his palace.

The chariot is in the form of a *makara*, from the top of which a flag flaps in the breeze. Channa the charioteer, is seen driving the vehicle, although the two horses drawing it are right under it and apparently well secure from his whip; the two wheels of the chariot are full and placed at the very back instead of in the middle of the vehicle. This peculiar position of the wheels and horses may have been due to the narrowness of the slab; it could have been avoided by making everything much smaller, but then, the four sculptures would have been out of proportion to all the others; and so the artists have preferred sacrificing correctness to symmetry.

In figure 26, we have the prince meeting a corpse. The latter is carried by two men in the manner still common in India. Did we not know what they are carrying, we should never have guessed that the almost round bundle on their stretcher was a dead body. Nor should we have expected it to be wrapped in a shroud; for the texts (particularly the later ones), delight in describing the horror of the object upon which the eyes of the future Buddha suddenly fell, and the emotion it produced in him.

As for the fourth time the prince set forth for his pleasance, the devas made to appear before him a Buddhist monk, decently robed and carrying his alms-bowl. The prince inquired what he was, and inasmuch as the Buddhist order of monks did not

as yet exist, the charioteer might well have felt embarrassed for an answer, but, inspired by the devas, he was able to explain the kind of life led by these holy men and their ultimate aim and aspiration. The prince was delighted and felt himself strongly drawn towards monastic life. On this occasion he did not turn back, but proceeded to the gardens. This sculpture, numbered 33 in the corridor, is not reproduced here.

Fig. 27. Siddhārtha in his pleasance.—Having seen the fourth omen, and his mind being filled with the desire to leave the world, the prince leisurely went on to his gardens. There, he disported himself, took a bath in a lotus-pond, and, after sunset, sat on a marble slab, round about him stood his attendants with costly stuffs, jewels and perfumes.

In this scene it is not easy to discriminate whether some of the attendants are men or women ; but the *Nidānakathā* (p. 59) is clear in stating that they are men and we must assume therefore that this is the case, though the rather developed breasts of one or two suggest the opposite. The Bodhisattva is seated in the *dhyāna-mudrā,* and seems to be meditating deeply on the four sights he has lately seen. This is little in the spirit of the *Nidānakathā* which conveys the idea that he had been and was still disporting and enjoying himself. The *Jinacharita* is somewhat more explicit (verses 135, 136) :—

Suphullanānātarusaṇḍamaṇḍitaṁ
sikhaṇḍisaṇḍādidijūpakūjitaṁ
sudassanīyaṁ viya Nandanaṁ vanaṁ
manoramuyyānam agā mahāyaso.

Suraṅganā sundarasundarīnaṁ
manorame vāditanachchagīte
surindalīlāya tahiṁ narindo
ramitva kāmaṁ dipadānam indo.

" He, the Famous, went to the beautiful park, as enchanting as the Nandana grove in Indra's heaven, resounding with the noise of peacocks and other birds, and adorned with groves of various kinds of well-blossomed trees.

" There, with the grace of a Śakra, the chief and lord of men took delight, indeed, in the pleasant dances and songs of women as beautiful as celestial nymphs." This attitude of intense meditation while he is enjoying himself amongst his women does not harmonize with so gay a scene.

Fig. 28. (Not reproduced)—Viśvakarman arranges the Bodhisattva's turban.—As his attendants were about to dress his hair and arrange his elaborate turban, the seat of Indra became hot, a sure sign something unusual was about to happen in the world of men. Indra looked down and perceiving what was going on in the royal gardens at Kapilavastu, he called Viśvakarman, the architect, and matchless artist of the gods and said : " Go, Viśvakarman, unto the presence of prince Siddhārtha ; at midnight he will leave his palace and go into the wilderness ; this is the last time he will be decked in all his fineries ; go thou, therefore, and array him in celestial ornaments." The divine artist came to earth in the guise of a barber, took from the hands of the prince's barbar his turban and arranged it in an exquisite manner on the Bodhisattva's head.[1]

[1] About barbers in ancient India, see Rhys Davids' *Buddhist India,* p. 94, and R. Ficks's " *Die Sociale Gliederung im Nordostlichen Indien zu Buddha's Zeit,*" p. 210.

In the background are three highly stylized trees representing the park. The prince is still in the *dhyāna-mudrā*; on his right, Viśvakarman is arranging the turban; on his left, an attendant is holding up a vase containing perfumes, below are two attendants, one holding a fan and the other what appears to be an article of dress; or perhaps he is the barber from whom the celestial artist took the headdress. For details of the way men of eminence dressed their hair, see figures 3, 13, 14, plate XXXVIII.

Here follows a sculpture (No. 36 in the corridor) representing the prince returning to the palace and meeting the messenger who was sent to tell him that a son had just been born to him. As the scene is the same as those shewn in figures 25 and 26 it has not been reproduced here. The only difference consists in the presence of a man, the messenger, who is kneeling before the chariot.

Fig. 29. The women play and sing to the prince.—Having heard the news of the birth of his son, Siddhārtha proceeded in great pomp to the palace and, entering his apartments, lay down on his couch. A bevy of fair damsels, skilled in music, dance and sing before him.

The Bodhisattva is reclining on his bed in the *sīhaseyyā* attitude (see p. 35). The numerous musicians and dancers are represented by four young women; four being in the Ānanda scenes the usual number by which a crowd or a throng is represented. One plays the harp, another the flute; the third an instrument very common in Burma, used for accompaniment. It consists of a bamboo cleft longitudinally from one extremity, to within a few inches of the other; one of the halves being drawn back with the right hand and released sharply into the other. The fourth is singing some love song; for her left hand is feelingly placed on her heart. But the prince whose mind was bent upon retirement from the world and whose heart had become free from all earthly desires cared nought for song or music, and fell asleep.

Just before this scene in the royal bed-chamber we should have expected the charming incident of *Kisā Gotamī*, the Mṛīgī of the Mahāvastu (ii, p. 157); for the words uttered by the young lady had a decisive effect on the prince's mind, already released from passion and did much to decide him to leave his palace on that very night. But this incident, like a good number of others, has been omitted.

Fig. 30. The slumber of the women.—The artists perceiving Siddhārtha had fallen asleep, ceased their performance and they, too, fell asleep. The prince, after a short while, awoke, and seeing the revolting spectacle presented by the slumbering women, conceived an instant disgust for the pleasures of this world and resolved to leave then and there and to go into the wilderness in search of escape from sorrow, or Nirvāṇa.

The women are seen, with their instruments thrown aside, sleeping on the floor, in most voluptuous pose.

Fig. 31. The prince calls his charioteer.—The prince then rose up, went to the door and calling his charioteer Channa, who was watching there, bade him saddle his horse Kanthaka for immediate departure. The prince is seen at the door of his apartment, giving his orders to Channa, who is kneeling on his right. The horse Kanthaka is represented here merely to determine the scene for he was not at that moment in the palace, but in his stable.[1] The strange device of exaggerating the size of the principal figure in a scene, is here carried to the point of absurdity. Kanthaka, a horse said to be-

[1] But *cf.* "*Art Gréco-bouddhique*," Vol. I. p. 353.

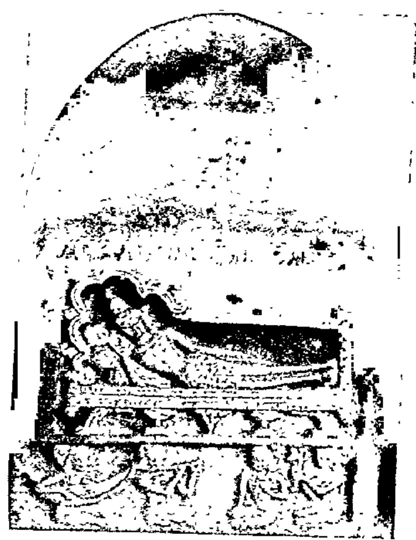
THE ANANDA TEMPLE AT PAGAN.



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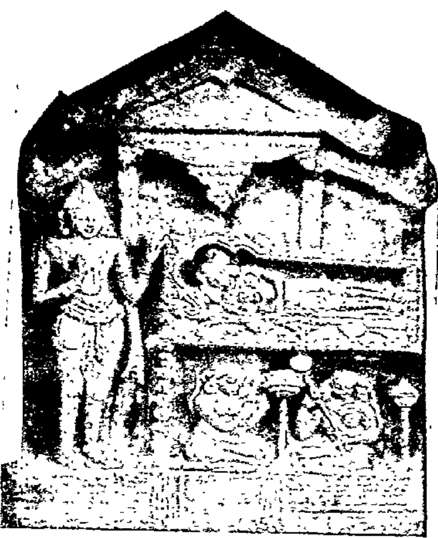
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Photo-Engraved & printed at the Offices of the Survey of India, Calcutta, [illegible]

of gigantic proportions comes up only to the Bodhisattva's knee and is even somewhat smaller than Channa kneeling. This fault is repeated in figures 36, 38, 39 and 40.

Fig. 32. Prince Siddhārtha wishes to see his child.—As soon as Channa had gone to execute the order, the prince felt a strong desire to see his newly born babe. Accordingly he went into the room of Yaśodharā, Rāhula's mother, but perceiving that his wife slept with a hand on the babe's head, he dared not take the child from her side, for fear of waking her and thereby frustrating his own intentions. He stopped therefore at the threshold, beheld for a few moments the two in their peaceful slumber and descended from the palace.

Rāhula's mother is sleeping, as will be remarked, on her right side. Probably the sculptors were not given exact instructions by the monks who superintended their work; for they do not follow the *Nidānakathā* (p. 62), according to which Yaśodharā had her hand on the child's head. In this sculpture she has her left hand on the right side as if apprehensive, even in her sleep, that he might fall off the bed; while the child has his right hand on her breasts. Below are two female attendants watching over the mother; their hair is undone, tied in a knot close to the back of the head and falling low between their shoulders.

The scene following (No. 41 of the series) shows the prince about to leave the world. Having gone forth from the palace, he made his way straight to his steed Kanthaka and addressed him thus: "Kanthaka, save me on this night: having become a Buddha, I shall save the worlds of gods and men from the misery of rebirths." The spirited horse seems to understand his master's exhortation, and appears to be impatient to start on the memorable journey. Channa is kneeling behind the horse. This plaque has been so badly damaged and so unskilfully repaired that it has not been reproduced.

Fig. 33. The Bodhisattva leaves Kapilavastu.—The prince then mounted his faithful steed, and ordered Channa to take hold of the tail and accompany him. Kanthaka was so powerful an animal that his neigh and his footfalls could be heard all over the city. The devas, by their power, prevented his neigh being heard and four of them placing their hands beneath the feet of the horse bore him noiselessly along and so prevented the city from awaking and hindering the Bodhisattva in his flight.

This scene is perhaps the most animated of all in the corridor, the animation being due not to any artistic elaboration, diversity or realism in the figures themselves, but rather to their number. The love of symmetry already referred to above. mars what might otherwise have been a really artistic creation. The four devas placing their palms under Kanthaka's feet are all in exactly the same position, like schoolboys practising drill; while on the proper left, on each side of the horse's head, are a deva torch-bearer and Channa, holding the tail, in the same attitude. So, too, the flying-gods carrying flowers and perfumes, are restricted to one posture. The best figure is that of the horse himself, though he is far from perfect. Among the few animal figures found in this series of sculptures this horse is the most successful.

Fig. 34. Māra tempts the Bodhisattva.—It was during the full moon of the month of Āsāḍha (āsāḷha=June-July) that the future Buddha left his palace, at midnight. A deity opened for him the city gate and he escaped into the moonlit night. At that moment Māra, the evil one, appeared to him, poised in the air, and endeavoured in

vain. to make him relinquish his quest for *nirvāṇa* by promising him, within eight days, universal rule over the world.

Māra Vaśavartin is seen on the proper left of Prince Siddhārtha, a little ahead of him, poised in mid air on a comfortable cushion and in the act of exhorting the prince to abandon his resolution. The flying figure with flowers opposite Māra is the god who presides over the destinies of the Moon and guides its course through the sky; the full moon is represented by a scroll design encircling him. It has just been said that the prince fled during the night of the full moon. Had this lunar god not held flowers in his hands and been placed in a circle of light, one might have taken him for a repetition of Māra who, from that moment, followed the Bodhisattva like his shadow, maliciously awaiting an opportunity to make him fail of his purpose.

Fig. 35. The Bodhisattva arrives at the river Anomā.—Siddhārtha went on his way, accompanied by multitudes of gods bearing torches, scattering on his way celestial flowers and perfumes and discoursing heavenly music. Having thus crossed three kingdoms, he arrived at the bank of the river Anomā, which Kanthaka crossed at a jump.

The trees, a cocoanut-tree and two fan-palms, so admirably executed, represent the jungle along the river bank. Had there been any indication of a city or palace in the background, this scene might just as well have represented the scene when, the Bodhisattva being anxious to behold Kapilavastu once again, the earth turned on itself like a potter's wheel and thus enabled him to gaze upon the city. Indeed, perhaps it was the turning round to sée the city that the artist meant to represent here, for the next sculpture, exactly the same as the present one but without the trees, and therefore not reproduced here, purports to show Kanthaka crossing the river.

Fig. 36. The Bodhisattva makes over his jewels to Chhanna.—Siddhārtha alighted from his horse, took off his jewels, gave them to Chhanna and told him to depart; for to become a monk was not his vocation.

Chhanna puts up his hands to receive his master's jewels, here represented by two pendants. The two very schematized trees indicate the wilderness. In this and most of the following scenes the locale of which is in the jungle, the Bodhisattva is placed at the door of a palace or temple, which strangely enough appears at every step in these lonely spots. Apparently the sculptors saw nothing incongruous in it, or else they worked without thinking of the matter at all.

Fig. 37. The Bodhisattva cuts off his hair.—Then, prince Siddhārtha reflecting that long hair was unbecoming to a monk, and that it was not to be cut by any one but himself, took his sword and cut off his hair together with his bejewelled turban.

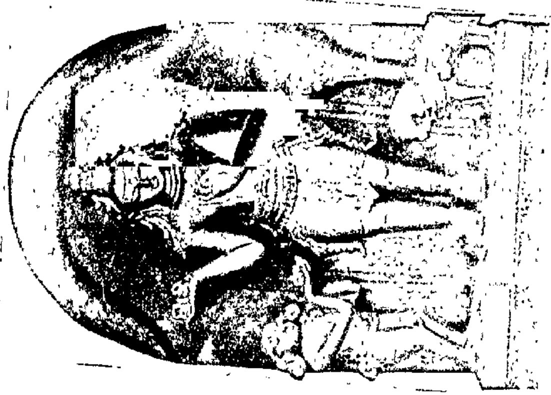
The gesture of the Bodhisattva as portrayed in this scene is exactly in accord with the *Nidānakathā* (p. 64) and other authorities which state that he cut his hair with the turban "moliyā saddhiṁ chulaṁ." The Gandhāran artists do not appear to have depicted this scene, nor does it seem to have been a favourite in India. To the Burmese on the contrary, it seems to have appealed from the first, if we are to judge by the frequency with which it is reiterated.

Fig. 38. The Bodhisattva throws up his hair.—Siddhārtha then took his hair with the bejewelled crest and saying: "If I am to become a Buddha, let my hair remain in the air; if not, let it fall back to the ground," he threw it up.

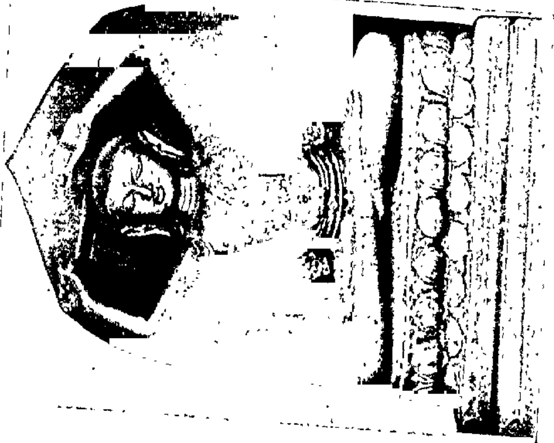
... AT PAGAN.



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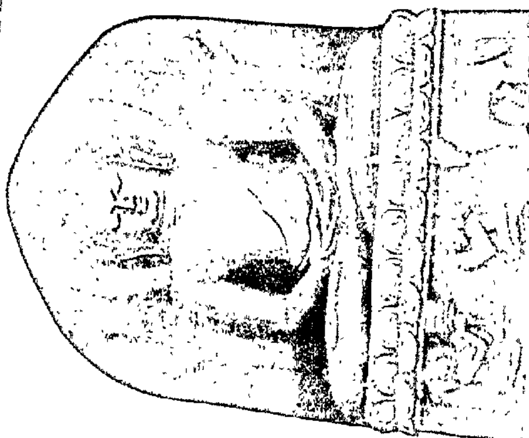
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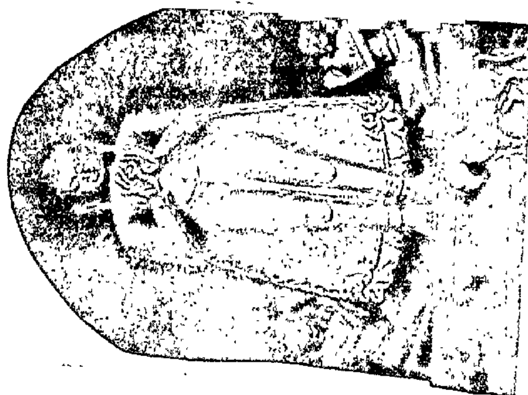
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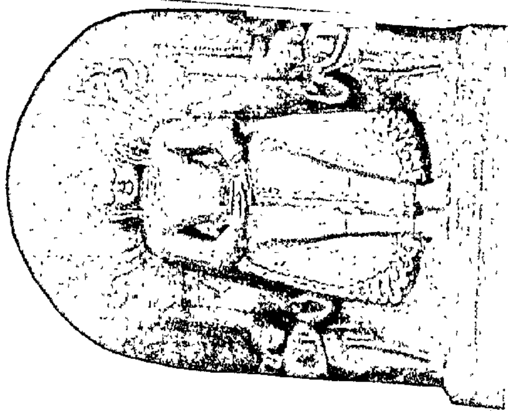
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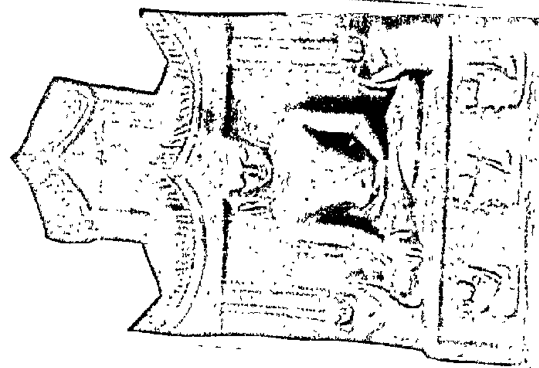
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The Bodhisattva is in the act of throwing up his hair. The *Jinatthapakāsanī* (p. 28) adds that, as it went up, it appeared as if it were a magnificent garland of flowers. This is not mentioned in the *Nidānakathā* ; but the *Jinatthapakāsanī* drew upon many sources and the compiler no doubt had before him some work that was already known to the Talaing monks who superintended the work of the sculptors at the Ānanda. On the proper left, we see Śakra receiving the precious hair, in the form of a garland and, on the other side, the same person carrying away to the Trayastriṁśa heaven, in a casket, the holy relic, over which he erected the *Chūlāmaṇichetiya*. Below are Chhanna and Kanthaka, witnessing all the phases of the transformation of the prince into a monk.

Fig. 39. The Bodhisattva changes his dress.—The prince further reflected that the dress of fine and costly cloth which he was then wearing was little in accord with the poverty and simplicity of a monk. Straightway the Mahābrahmā angel Ghaṭikāra who had been a friend of his in the time of the Buddha Kassapa, perceiving his friend had entered upon the great renunciation, brought down the eight requisites indispensable to a monk, the three robes, the alms-bowl, *etc.*, and offered them to him. The future Buddha thereupon changed his dress.

The Mahābrahmā Ghaṭikāra is at once recognizable by his three visible heads; he is holding a casket in which are placed the monk's requisites. The Bodhisattva is now transformed into a monk ; his career has begun in earnest, and the humble yellow dress will, henceforth, never be put off. The charioteer and the devoted horse behold with sorrow the momentous change.

Fig. 40. The Farewell.—Having donned the yellow garb, the Bodhisattva addressed *Chhanna* saying " Go, *Chhanna*, salute my father and mother in my name, and tell them I am well." *Chhanna* respectfully passed three times round his master, keeping him to his right, and departed with Kanthaka ; but the latter, hearing the words spoken to the charioteer, could not repress his sorrow and, passing from the sight of the Bodhisattva, died of a broken heart.

In this scene, *Chhanna* is kneeling reverentially bidding adieu to the Bodhisattva ; we should have expected to see on or near him the bundle containing prince Siddhārtha's ornaments, which he was to take back to Kapilavastu. Apparently, Ghaṭikāra was loath to depart, for our artists have placed him on the other side, also taking his leave. On this point the *Nidānakathā* is silent, but other sources state that he threw his princely clothes into the sky, and that Ghaṭikāra catching them up took them to the Brahma world, where he built over them the *Dussathūpa* shrine. The farewell to *Channa* really takes place after the departure of Ghaṭikāra only. *Cf. Jinacharita*, verses 192-193 ; *Jinatthapakāsanī*, p. 28.

The scenes numbered 51 and 52 in the corridor have not been reproduced here as there is nothing remarkable in them and they might serve to represent many an event in the Buddha's life. The first portrays the Bodhisattva in the Anupiya grove ; he is seated in the *bhūmisparśa mudrā* on a lotus throne, and is an exact counter-part of figure 51, with the omission of the ornaments at the back and the small figure on the right hand. The second one represents him proceeding from the Anupiya grove to the capital of Magadha, Rājagṛiha ; he is in the same attitude as in figure 53.

Fig. 41. The Bodhisattva enters Rājagṛiha.—Having walked in one day the thirty

yojanas separating Anupiya from Rājagṛiha, the Bodhisattva entered the city in quest of food. As he was going the round of the houses for alms, his appearance struck the inhabitants with wonderment; they knew not whether he was a mortal, a god, or some other being. King Bimbisāra was apprized of the great man's arrival and having seen him from the terrace of his palace, sent messengers to ascertain who and what he was.

The messengers of Bimbisāra are seen at their task. They watch him beg his food with a bowl in his hands, and they follow him to the Pāṇḍava rock where having seated himself, he makes heroic efforts to overcome his dislike of the food he had received. The latter is depicted in the next sculpture, No. 54, not reproduced here.

Fig. 42. King Bimbisāra visits the Śramana Gotama.—The messengers went back and related to the king what they had seen. Bimbisāra hastened into the presence of the sage and offered him his kingdom, but the Bodhisattva refused, saying that he looked only for supreme wisdom. Bimbisāra then begged that, when he had become the Buddha, he would be pleased to reseive his first visit for his kingdom; and this the Bodhisattva promised.

The king is seated below, in regal dress and with his crown; in front of him is his queen; the two other female figures are ladies from the palace. The future Buddha is wrongly represented in the *dhyāna-mudrā*; he should have been in an easier attitude, since he was then holding converse with the king.

Fig. 43. The Bodhisattva with Āḷāra Kālāma.—After Bimbisāra's visit, the Bodhisattva went from place to place in Magadha and in due course met with the famous Āḷāra Kālāma, the great teacher of philosophy, under whom he learned the several degrees of abstract meditation.

The ascetic Āḷāra is on the right, distinguished by his two top knots, and his sunken stomach—the result of fasting. Opposite him is the Śramana Gotama, learning from his master. They are discussing some knotty point. Below, are three disciples of Āḷāra. The stylized trees represent the jungle.

The next scene, numbered 57 in the corridor, portrays the Bodhisattva under the tuition of Uddaka, the son of Rāma, another famous ascetic teacher of the time, to whom he went after leaving Āḷāra. It is almost the same as the previous scene, the two trees alone being somewhat different; and inasmuch as it has been very badly repaired, it is not reproduced here.

Fig. 44. Gotama and the five mendicants.—Gotama was dissatisfied with his two masters' teaching and convinced that it was not the true path towards enlightenment. So, resolved to attain his object by his own unaided exertion, he repaired to Uruvilvā (P. Uruvelā). There he met with the *Pañchavaggiyas*, the five mendicants who were some years later, to become his first five disciples and form the nucleus of his Order. Persuaded he would become the Buddha, they remained with him.

In the sculptures of Gandhāra, the place of honour is always on the left, but in the Ānanda it is regularly on the right; so that the personage on the proper right is Kauṇḍinya, that on the left, Aśvajit; and the other three, Vāshpa, Māhānāman and Bhaḍrika.

Fig. 45. The fast of Gotama.—The Bodhisattva thus spent six years in abstract meditation. Then he resolved to practise severe penance; and beginning to fast, carried it so far that he came to eat only one grain of rice a day. Then he went a step

further and ate nothing at all. He could not have long withstood such a strain, but devas came who nourished him with ambrosia by rubbing it into the pores of his skin.

A glance at " The Ascetic Gautama " published by Spooner in his *Handbook to the sculptures in the Peshawar Museum*, p. 67, and at the one in the British Museum, published by Foucher in his *Art Gréco-bouddhique*, Vol. I, p. 381, will shew how inferior in skill and technique were the Ānanda artists. But for the ribs that stand out somewhat prominently, a few wrinkles on the forehead and his wasted stomach, our Ascetic Gotama is apparently in excellent condition—nay, even corpulent—for one who had undergone so extreme a penance. On both sides, the devas are busy distilling ambrosia into his body. The deva on the proper right has been retouched by a mason.

Fig. 46. Gotama falls in a swoon.—While Gotama was undergoing this severe penance, one day, when absorbed in deep meditation, his strength failed him and he fainted and fell. Some of the gods thought that he was dead.

The unreflecting conventionality which characterises these sculptures is especially conspicuous in this scene. The Bodhisattva is here portrayed perfectly composed and lying on his right side in the *sīhaseyyā*. This is scarcely the posture in which a person weak and fainting from exhaustion would naturally fall. The fact is that the sculptor has shewn him in the *parinirvāṇa* attitude, which was familiar to him, without giving further thought to his subject : sufficient to him that the Bodhisattva be neither standing nor sitting; but perhaps he was also guided in this by the overseers who may have thought it little edifying to present to the eyes of the faithful the future Buddha lying in a heap on the ground. Two mistakes again have been committed ; on the one hand, the great ascetic has suddenly lost all his emaciation, and is in perfectly normal condition ; on the other, the deva on the right who stands for the host of gods who came to see whether he was dead or not, has the nimbus instead of the Bodhisattva, although the latter himself could scarcely be given one, since it is said that, owing to his extreme weakness, all the signs of his grandeur and glory had disappeared.

The next two sculptures, Nos. 61 and 62 in the Ānanda are not reproduced here ; both are identical, the Buddha being seated in the *bhūmisparśa-mudrā* as in figures 44 and 51, with the only difference that he is, in both, holding an alms-bowl in his left hand which is resting on his lap. In the first (No. 61) he has recovered from his faint, and the bowl shows that he is determined to eat food now, since fasting and penance do not lead to emancipation from sorrow. He is alone, the pañchavaggiyas having left him in disgust at what they thought was his return to ease and comfort. In No. 62, at the Bodhisattva's feet is the servant girl Pūṛnā and behind her a small banyan tree. Pūṛṇā had been sent by her mistress Sujātā to clear a space beneath the banyan tree for her yearly offering. On this very day Gotama was destined to become the Buddha, and the radiance issuing from him illuminated the whole tree ; the girl thought it was the spirit of the tree and went back to tell her mistress what she had seen.

Fig. 47 Sujātā offers a meal to the future Buddha.—In the latter part of the night Gotama had five dreams, from which he knew he was to become the Buddha on that day. At daybreak, while in quest of food, he stopped at the foot of a holy tree, and it was there that Pūṛṇā, as stated above, saw him. On hearing what her servant had seen. Sujātā

poured her offering of milk in a golden vessel, covered it over with another, repaired to the tree with Pūrṇā and herself offered the milk to the great sage.

On the proper right—the place of honour—Sujātā presents the milk which will sustain the Buddha for seven weeks ; on the other side is the servant girl Pūrṇā. Above Gotama, who now has the nimbus, is the holy banyan tree.

The four scenes which follow (Nos. 64, 65, 66 and 67) represent the Bodhisattva in the same attitudes; namely in the *dhyāna-mudrā* and the *bhūmisparśa-mudrā.* Accordingly they are not reproduced. No. 64 shews him after his bath in the Nairañjānā on the bank of the river. No. 65 purports to show him taking the meal offered by Sujātā ; in No. 66 he is supposed to throw the golden bowl in the Nairañjanā, as all his predecessors had done. In the above three sculptures he is in the *dhyānamudrā,* and it is left to the imagination to guess at the scenes meant to be represented. The utter lack of imagination and originality displayed here is striking. No. 67 shows him after his meal seated on the river bank. But it may be added that, in all these scenes there are gates of temples in the background without a single indication of river or jungle.

Fig. 48. The Bodhisattva proceeds towards the bodhi tree.—On the evening of the same day, the Bodhisattva began his progress towards the Tree of Wisdom, along a path beautifully prepared by the devas and accompanied by the latter. Two devas carry banners, a third, unseen, being behind the great man, holds a white umbrella over his head.

Fig. 49. The Bodhisattva meets with the grasscutter.—As he was thus proceeding, he met with Svastika, the grasscutter. The latter, inspired as to what was going on and guessing what the Bodhisattva required, offered him eight handfuls of grass, which the sage accepted. The grass was destined to be his seat under the Tree of Wisdom.

The four numbers that follow, 70-73 are again repetitions of the same attitude as that in figure 49, the Bodhisattva holding his two hands in front of his chest in the act of holding the grass. In No. 70, he approaches the Bo tree from the south, but perceives that it is not the proper direction ; similarly in Nos. 71 and 72 in which he approaches from the west and north. In No. 73 he approaches from the east, the proper quarter. In all these again, richly ornamented gates of temples are seen in the background.

Fig. 50. The Bodhisattva sits under the Tree of Wisdom.—Having approached the Bo tree from the east, he held the grass by one end and shook it, and a throne of fourteen feet appeared on which was strewn the grass. It was then that he took the unshakable resolution not to leave his seat until he had become a Buddha, and that Māra came with his mighty army. There were then near him, Śakra blowing his conch, Mahābrahmā holding the white umbrella, the *Nāgarājā* Mahākāla singing the praise of the great sage, and an innumerable throng of devas.

It will be remarked that the Nāga-king Mahākāla is conspicuous by his absence ; there was no room left for him and so he was crowded out. His absence, perhaps, may be symbolical of the fact that he was one of the first of all the gods to take to flight on the approach of Māra's army. The holy one is seen in the *bhūmisparśa-mudrā* attitude, the fingers of the right hand pointing towards the ground : he is calling

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Photo-Engraved & printed at the Offices of the Survey of India, Calcutta, 19[illegible]

Mother-Earth to witness that this seat of Wisdom belongs to him. On no other occasion prior to this event ought he to have been represented in this attitude, as is rather often the case in this series of sculptures. The charming legend of how Mother-Earth answered the Buddha has taken root all over Burma, and the statue of the Earth bearing witness is found on almost all important pagodas. She is represented as a woman either kneeling or standing, but generally the latter, with the tresses of her hair falling in front of her breast, while with both hands she is wringing the water from it. Thus is symbolized the water which is poured on the ground on an act of asseveration being performed.

Above the Sage a very much stylized tree represents the sacred banyan tree (*ficus religiosa*) under which he attained Supreme Enlightenment.

Fig. 51. The contest with Māra.—This sculpture is chiefly interesting in that, it seems rather to go back to the oldest texts, which are mostly very sober, than to the *Nidānakathā* and other later works. There is nothing here of the monstrous warriors and horrible figures which formed an essential part of this scene in India. Māra is here seen on the right of the Bodhisattva. There is nothing warlike about him ; he appears, as the principle of evil, to be murmuring temptations of wordly power and enjoyments in the Bodhisattva's ear, and here, the word 'temptation' would have been more appropriate than " contest." The gruesome warriors who assaulted the Sage were, no doubt, known to our sculptors, as well as to the Talaing monks who supervised their work ; for they are found represented on terra-cotta plaques in the basement of the Ānanda itself.[1] Evidently therefore the monks who directed the artists must have given explicit instructions as to how they desired the scene to be presented.

Fig. 52. The temptation.—Māra failed in his endeavours and his three daughters, seeing him dejected, resolved to retrieve his defeat, and repaired to the Goatherd's Banyan Tree (Ajapāla) where the Buddha, in the fifth week after his Perfect Enlightenment was seated investigating the Law. But their blandishments and wiles proved as ineffectual as their father's efforts and they had to retire, beaten and crestfallen.

Māra's three daughters are seen dancing before the Buddha, while two other *apsaras*, on the right hand, are kneeling down, holding what appear to be flowers and garlands. The Ajapāla Banyan tree, which should have been placed behind the Buddha, is seen behind one of the two seated *apsaras*.

The last two sculptures (Nos. 79 and 80) in which the Buddha is seated in the *bhūmisparśa-mudrā* are not reproduced here. They do not appear to be in their original places ; No. 79, which purports to shew the throngs of the *devas* honouring the Bodhisattva under the Tree of Wisdom should have come immediately before or after figure 50 ; for, as was said there, besides Śakra, Mahābrahmā and the Nāga-king Mahākāla, the devas also were present from thousands of worlds, and they, too, fled at the approach of Māra. No. 80 shews us the Mahāpurisa just as he emerges from the last stage of his Bodhisattvaship into the state of the perfectly enlightened Buddha, after his victory against Māra's hosts ; *cf. Nidānakathā, pp.* 75-76. To be correct, therefore, it ought to have come immediately after figure 51, and before figure 52, since the temptation by Māra's daughters took place in the fifth week after the Perfect Enlightenment. But

[1] *Cf.* my *Provincial Report* for 1913-14, p. 14.

it may be that this scene was purposely placed last of all, with the pious intention of leaving on the mind of the devout visitor an indelible impression of the fortitude and majesty of the Great Being who, to open wide the doors of salvation from death and sorrow, practised the highest virtues during countless ages.

The sculptures in the porticoes.

It will be seen from the foregoing, that the purpose of the eighty scenes in the outer corridor of the Ānanda was solely to represent the salient events of the Bodhisattva's last existence, from the time of his birth to that of his attainment of Buddhahood only. Only a few of the subsequent events up to the *mahāparinirvāṇa* are found represented in the Ānanda. These with others are in the four porticoes, each of which as has already been said contains sixteen sculptured stone slabs. Unfortunately, most of the scenes are mere reduplications of a few types. For instance, in each portico are two or three exact copies of the "Birth of the Bodhisattva," of the "Descent from the Trayastriṁśa," of the "Submission of Nālāgiri," *etc.*; so that, out of sixty-four reliefs there are only five scenes which are not repetitions of one or other found in the corridor and which refer to the Buddha's and not to the Bodhisattva's career. A few of these scenes are also to be seen in the Nagāyon temple at Pagan, but these are exactly the same in conception and execution as those in the Ānanda porticoes and possess therefore no particular interest.

There is every reason to believe that this arrangement is not the original one. All the events subsequent to the attainment of Buddhahood under the Bo tree must certainly have been represented in the sixty-four scenes of the porticoes. It has already been remarked several times that not a few of the steles in the corridor showed unmistakable signs of having been broken or damaged and crudely repaired. Probably most of the sculptures in the porticoes met with an even worse fate, and were damaged altogether beyond repair. The empty niches being afterwards fitted with similar sculptures taken from other temples, of which a great many have long since disappeared, not a few having been dismantled for building fortifications at the time of the Tartar invasion at the close of the 13th century A.D. How, otherwise, can we explain, within the circumscribed area of each portico, the multiple repetition of the same scenes, often side by side? For it is well known how rich a mine the legendary history of the Buddha is, and what an abundant harvest of pictorial illustrations it may yield even to an artist endowed but with little imagination.

Fig. 53. The Descent from the Trayastriṁśa heaven.—This scene represents the well-known incident of the Buddha's descent from the heaven of the Trayastriṁśa devas, whither he had gone to deliver a series of sermons. When he came down again, the architect of the gods, Viśvakarman, built three stairs of precious metals the feet of which were at Sāṅkāśya, the middle one being intended for the Buddha, the two others for Śakra and Brahmā. The conception of this scene is in no way original; the general outlines are, as was but to be expected, copied from sculptures of the same event in India, but, as is almost always the case in the Ānanda, Brahmā is on the Buddha's left, holding the umbrella and Śakra on his right, holding his conch; in India their respective positions are reversed. The sculptor has made here a capital mistake: he has placed Sāriputra, the small kneeling figure between the Master and Śakra, at

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the top of the stairs, that is, in the Trayastriṁśa heaven itself, instead of at the bottom, at Sāṅkāśya, where the great disciple was waiting to receive him after his long absence. There is in the Archæological Museum at Pagan a beautiful wood-carving shewing the same scene ; but in it, the stairs are rightly placed behind the three principal personages, with Sāriputra in exactly the same position as in the present scene.

Fig. 54. The sojourn at Pārileyyaka.—This interesting episode took place shortly after the arrival of the Buddha at Kauśāmbī. It originated in the dispute between a divine (vinayadhara) and a propounder of the dharma (dhammakathika). The latter, it is said, had committed a fault on a point of discipline ; the former accused him publicly ; the propounder of the *dharma* protested. Thus arose a dispute in which most of the monks in Kauśāmbī took part on the one side or on the other. and two camps were formed, between which the dispute and wrangling became daily more violent. The Master was advised by one of the monks of what was going on, but all the efforts of the Buddha to reconcile the two parties were fruitless. It was on this occasion that he told the touching story of Dīghīti king of Kośala.[1] Annoyed and disgusted with the obstinacy of the monks, he left Kauśāmbī alone and in due course arrived in the wilderness of Pārileyyaka. There, a noble elephant, also disgusted with the doings of his herd, separated from them, came to the same spot, met with the Buddha and served him, carrying his alms-bowl, bringing water, making fire by rubbing sticks, *etc.* A monkey saw him at his tasks and thought that he, too, would obtain great merit by serving the Master. So perceiving a hive from which the bees had gone forth he broke off a piece of the honey-comb and brought it on a plantain leaf to the Master. The latter ate, and the monkey was so rejoiced that he climbed a tree and gambolled about ; but the branches broke and he fell and was killed and was reborn forthwith among the Trayastriṁśas.

The Pārileyyaka incident is given in the *Vinayapiṭakaṁ*, Vol. I, Mahāvagga, pp. 352-353, where no mention of the monkey is made. The *Tathāgata Udānaṁ*, on which Bigandet is based, ignores also the monkey, which however, is mentioned in the *Commentary on the Dhammapada*[2], Vol. I, part 1, which gives the complete story, pp. 53 *ff*, Kosambaka-vatthu, which is reproduced *in extenso* in the *Jinatthapakāsanī*, pp. 433 *ff*. With the story of the monkey as briefly narrated above, may be compared also " L'offrande du singe " as given by Foucher in his *Art Gréco-bouddhique*, p. 512*f*. Although in the several sources the scene of this event is laid in different places ; namely in Vaiśālī, Śrāvasti, Kauśambī, it will be observed nevertheless that the monkey invariably comes to an untimely end immediately after his offering, in the one story by falling into a hole or well, in the other by being impaled on a sharp stump. In both cases the lesson is the same : he is enabled through his sudden death to receive the instant reward of his deed. Despite the different settings, there can be no doubt that the story is essentially the same.

Here, we see the Buddha, seated European fashion, his hands on his lap, receiving the monkey's offering of honey. The figure of the latter is repeated, first, on the extreme right where he is standing up and offering with both hands the honey-comb

[1] See my translation of it " The Story of Dīghāvu from Burmese sources " in *Buddhism*, Rangoon, 1905, Vol. II, No. 2, pp. 289 *ff*.

[2] Published by the Pali Text Society, 1906.

(*madhupaṭalaṁ*) ; then, after the Buddha has partaken of his gift, gambolling with delight and running joyfully to the death and reward which await him. On the other side is the Pārileyyaka elephant. His fate too was sealed ; for, when the monks of Kauśambī were at last reconciled and came to fetch the Master, the noble elephant, at his departure, died of a broken heart and was reborn among the Trayastriṁśas. In the Gandhāran sculptures the Buddha is represented seated in a monastery in which, some northern sources say, this episode took place, and he is surrounded by monks, which in such a place is quite natural. In the southern texts the scene is laid in a wilderness, but in spite of this we see the Buddha seated at the gate of a temple, although trees in the background indicate the wilderness. The two monks at his side should not have been present, as the monkey incident took place long before the two reconciled parties came to make their submission.

Fig. 55. The yaksha Āṭavika.—The story of the conversion of the yaksha Āṭavika is too well known to need repetition here. As in the case of many other legends, so in this one there are two versions : an older and a later one, of which the former is as usual, the more sober and restrained. The old version is found in the *Suttanipāta*,[1] Uragavagga, 10, Āḷavakasutta, *p.* 31, where it is simply said that the yaksha went to the place where the Buddha dwelt at Āḷavī, and ordered him in and out of it several times, and the Buddha meekly obeyed his commands. Then the yaksha put him several questions to be rightly answered under pain of a dreadful death. The questions were answered and Āḷavaka was converted. The later version [2] introduces the king of Āḷavī, who, while on a hunt, is caught by the terrible yaksha and obtained his freedom and life on condition that he should send a human being daily to the monster to be devoured. After a few years there remained no one to be sent but the king's little son, and he too was sent. But the Buddha came from Śrāvastī to Āṭavī, entered the dwelling of the yaksha, and when, the latter propounded his usual questions, answered them and so converted the yaksha and gave back the little prince unhurt.

From the sculpture it appears that the artist followed the older version of the story ; otherwise, the little babe would have been depicted. The Buddha, his two hands raised in front of his chest, in a position resembling the *vitarka-mudrā*, is answering the subtle questions of the yaksha Āṭavika, and the latter, on the Master's left, with his hands joined over his chest in the attitude of adoration is signifying his conversion. The monk on the proper right represents the Buddha's disciples who were then with him in his dwelling, the latter presumably indicated by the elaborate gate in the background.

Fig. 56. Submission of the elephant Nālāgiri.—Of the attempts made by Devadatta against the Buddha's life, the most famous was that connected with the elephant Nālāgiri, whom he made intoxicated and then let loose on the high road of Rājagriha, in the hope that he would crush the Master to death. But as the great animal approached, the spirit of benevolence from the Buddha so subdued him that he at once lowered his trunk and became calm and meek.

The elephant is seen crouching at the Buddha's feet. We have seen before how

[1] Edited by Fausböll, London, 1885.

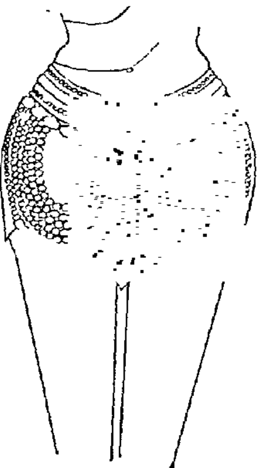
[2] Cf. Jinatthapakāsanī pp. 479 *ff* ; Hardy's "*Manual of Buddhism*," pp. 261 *ff*.

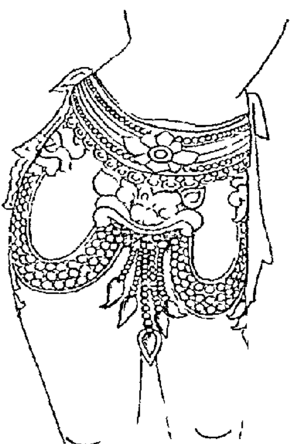


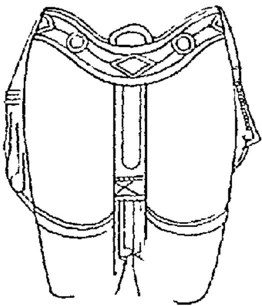
PLATE XXXVIII.

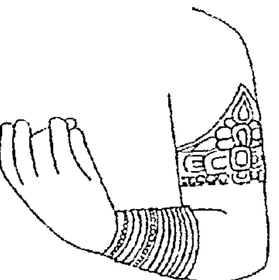

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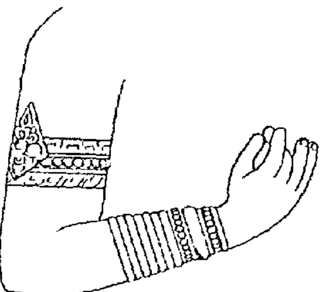

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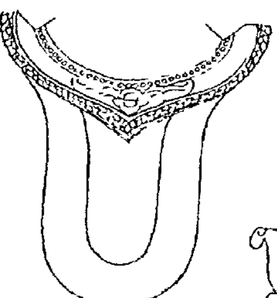

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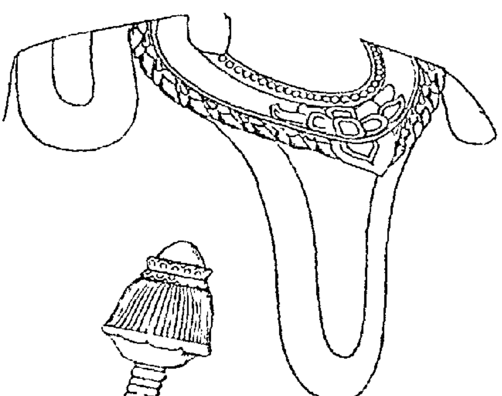

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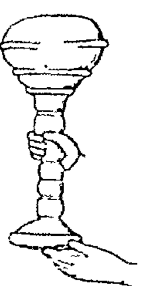

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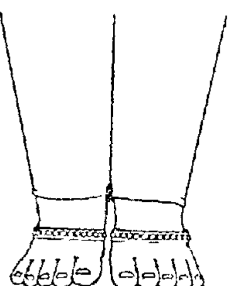

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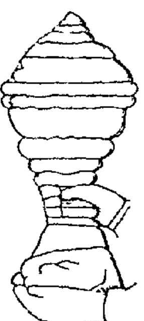

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the horse Kanthaka became a mere pigmy when placed beside the Bodhisattva ; here, the absurdity is carried still further, for Nālāgiri might almost be taken for a rat. The texts say that the Master patted the animal on the head, and he is thus represented by Gandhāran artists ; but here, he is in the *vara-mudrā*, conferring his blessings. When the Buddha was attacked, he was in the street, accompanied by his monks, two of whom are seen carrying alms-bowls. Instead of a house, from which one or two persons might have been made to peep at the coming onslaught we again perceive the meaningless temple or palace. It will be remarked that, but for the elephant, the scene would be one common enough in Buddhist sculptures: namely the Buddha accompanied by two attendants, whether monks or Śakra and Brahmā or men, and one which is made to suit many episodes by adding some particular person or object to distinguish the scene. See for instance figures 14 and 15 the identity of which can only be guessed at from the positions of the steles in the series.

Figs. 57 and 58 constitute, so far as I am aware, the only specimens of portraits in stone of real personages to be found in Burma proper. Hence they are peculiarly interesting.[1] Both are life size in a kneeling posture, the King to the left and the great apostle to the right of the enormous image of Gotama Buddha placed in the western face of the central square pile of the Ānanda.

Fig. 57 is King Kyanzitthā (1084—1112 A.D.), the founder of the temple, one of the most famous hero-kings of Burma and one of the greatest soldiers this country has ever known. His sharply cut features and square chin stamp him as a man of uncommonly strong character. It will be remarked that his cast of countenance is not truly Mongolian, or Burmese, his mother having been an Indian Princess.

Fig. 58 is the likeness of Shin Arahan, a Talaing monk, the Apostle of Burma ; the dates of his birth and death are not known. What is certain about him is that he hailed from what we call now " Lower Burma," but which is in reality the Talaing or Mōn Country, Rāmaññadesa. He came to Burma (=Upper Burma) in the reign of King Anoratha (1044—1077 A.D.) and by his zeal, earnestness and learning, did much to establish on a firm basis the Sinhalese form of Buddhism at the capital, Pagan, whence it spread all over the country.

CHARLES DUROISELLE.

[1] The only other statue of an historical personage was found by Dr. Forchhammer at Mrohaung in Arakan Archæological Reports on Arakan, II, " Mrohaung " no date—, p. 19) ; it is the likeness of King Candasudhamma otherwise, Pachāmari, who reigned from 1652 to 1684 A.D.

EXCAVATIONS AT BASARH.

IT is, of course, a matter of common knowledge, that one of the most prominent of the outstanding problems in Indian Archæology is that of the exact location of the famous capital of the Licchavis, Vaiśālī. I believe I am right in stating that the majority of scholars are inclined to accept the proposed identification with Rājā Bisāl kā Gaṛh at Basarh, in the Muzaffarpore District of Bihar. There is a not inconsiderable body of evidence to support this identification, but there is no reason to rehearse it here. Dr. Bloch has already discussed the matter in detail in his account of his operations at Basarh in 1904.[1] But although the evidences appear to most, if not, indeed, to all archæologists in the actual field, sufficient to warrant the equation named above, it has nevertheless not been universally accepted ; and so long as scholars of the eminence of Dr. Fleet refuse to credit it, the problem can hardly claim to have ound final settlement. It was doubtless for reasons such as this, and in the hope of gaining definite and incontrovertible evidence one way or the other, that my predecessor undertook his excavations here. To my own mind, his results were fairly satisfactory as tending to confirm the prevalent view. But it must be admitted, I think, that the limited amount of work which alone he was enabled to carry out in that first season did not yield quite such definite and unquestionable proof of the identity with Vaiśālī as might be wished, or, indeed, as had been hoped for. What is more surprising, it had not demonstrated in any sufficiently clear and unmistakable manner, even so much as a really high antiquity for the site, apart from the question of its identity. On the other hand, the very remarkable collection of inscribed seals of the 4th and 5th centuries A.D. which Dr. Bloch got together, did prove conclusively that what is now Basarh, was, in the Gupta period, an important centre, and apparently an official centre at that, as many of his seals were of an unmistakably official nature. Some of them, by geographical allusions and even by the specific mention of Vaiśālī, seemed confirmatory of the current theory of the site, but it could not be affirmed that the question was necessarily settled by this evidence. However, enough had been found to establish the importance of the site ; and when the limited area covered by the excavations was remembered, and the comparatively shallow digging which was all that he had been able to undertake, it became evident that a continuation of his labours was desirable. It was anticipated that further excavations might reasonably

[1] Cf. A. S. R. 1903-1904, pages 81-122.

be hoped to yield (1) possibly some trace of the royal palace, which is naturally assumed to have stood somewhere within the moated enclosure where Dr. Bloch dug ; (2) probably some fresh clue to the identity of the site ; (3) almost certainly some clear evidence for a higher antiquity than had so far been established, and, (4) at all events, additional inscribed seals which could not fail to be of interest and value.

The first of these four hopes was disappointed. No trace of any palace building, recognizable as such, was found.

The second was only partially fulfilled. More evidence pointing to the identity of Basarh with Vaiśālī was certainly obtained; but it was evidence of much the same sort as had been found before, and therefore not of itself conclusive. However, since the probability of this identification is strengthened by the accumulation of evidences, it may be claimed that the excavations to be described in this paper have advanced the enquiry, and have provided us with several additional reasons for believing that the capital of the Licchavis was really here.

As regards the third point, our expectations were realized. Whereas Dr. Bloch's results had taken us back with certainty to the Gupta period, with suggestions of earlier occupation, the present excavations clearly establish the occupation of the site for the Kushaṇa, the Śunga, and even the Mauryan age. The evidences for the Mauryan period are not plentiful. They are limited to a couple of inscribed seals, one fragment of polished stone, and a few terracotta figurines. But even these are quite enough to prove the high antiquity of a site, for whose great age there has been all along presumptive evidence, in the presence of the supposedly Mauryan column at Bakhra, in the immediate neighbourhood. But the mere fact that a monument of the remote past stood in this locality, said nothing as to the age of the particular mound in question, so that the present evidence constitutes a real advance. It takes back the age of Rājā Bisāl kā Gaṛh from the fourth century A.D., where Dr. Bloch left it, to the third century B.C. And there is no reason at all to assume that an even higher antiquity can not be established for the site when a more extensive examination of the lower strata is made possible.

As for the fourth hope with which we started, namely the recovery of more inscribed seals of interest, the season was abundantly successful. No such single hoard of seals fell to our lot as the magnificent collection found in a separate chamber by Dr. Bloch, nor do our present seals equal in number of specimens the find of 1904. But whereas Dr. Bloch recovered over 700 clay sealings, with something like 1,100 seal impressions, and we found only 283 impressions, on 235 lumps of clay, the variation in the present collection is relatively greater than in 1904. Dr. Bloch records "approximately 120 varieties" (loc. cit., p. 101) among his seals, whereas our smaller collection shows much the same number of types. When it is further remembered, that of all Dr. Bloch's 720 sealings, 710 were found in one hoard, and only 10 in general excavation, the superiority, relatively, of the present yield becomes apparent. But it is only fair to Dr. Bloch to acknowledge gratefully that I profited by his experience. When he first went there, he had no special reason to anticipate such finds ; I went there, thanks to him, on the special look-out for these very things.

Barring our failure to find traces of the actual palace, therefore, the hopes with which the present work was undertaken have by no means met with disappointment

Definite results have been attained in three of our four directions, and certain unexpected gains accrue as well. That is to say, the yield of pottery was much richer than any one had reason to anticipate.

We obtained several hundred specimens in an almost intact state. The exact position in which each one of these was found has been recorded with scrupulous care, and the collection as a whole thus constitutes a real addition to the all too limited material existing in our museums for a study of this class of antiquities. Finds of pottery are abundant at most excavations, but it is, I believe, only comparatively recently, since Sir John Marshall's coming, that any particular attention has been devoted to the registration of the findspot in each case, so that for most of our existing pieces we have no data as regards the original depth or association of individual specimens. Whether even the most careful registration will ever enable us to trace the development of pottery in India with such success that we can determine with accuracy the precise age of undecorated fragments, on the basis of form and texture alone is perhaps doubtful. Singularly little progress or variation is at present perceptible, and the modern bazar produces, in abundance, pottery which is not readily to be differentiated from very ancient types. But a classification along broad general lines is even now beginning to seem feasible, and it is reasonable to hope that the adequate and systematic study of suitably recorded specimens will gradually advance our knowledge. Such advance at any rate is quite impossible until more scientific data are available, and thus, although I cannot claim that the present collection *per se* will appreciably extend our knowledge, it at least improves our chances of ultimately extending it.

A further unexpected gain from this year's work and one of greater interest than the yield of pottery, consists in the fairly large collection of terracotta figurines recovered (cf. Plates XLIII, XLIV, XLV). Material of this class, showing as it does the peculiar characteristics of particular art periods in India, is useful for dating, not only the strata where it occurs, but also the otherwise undateable finds in association with it. It is, however, essential that the eye which attempts such dating and classification should be really trained, and it is therefore a source of satisfaction to me to record, that in dealing with this portion of my finds, I have had the guidance of Sir John Marshall, whose experience and authority in such matters are unrivalled.

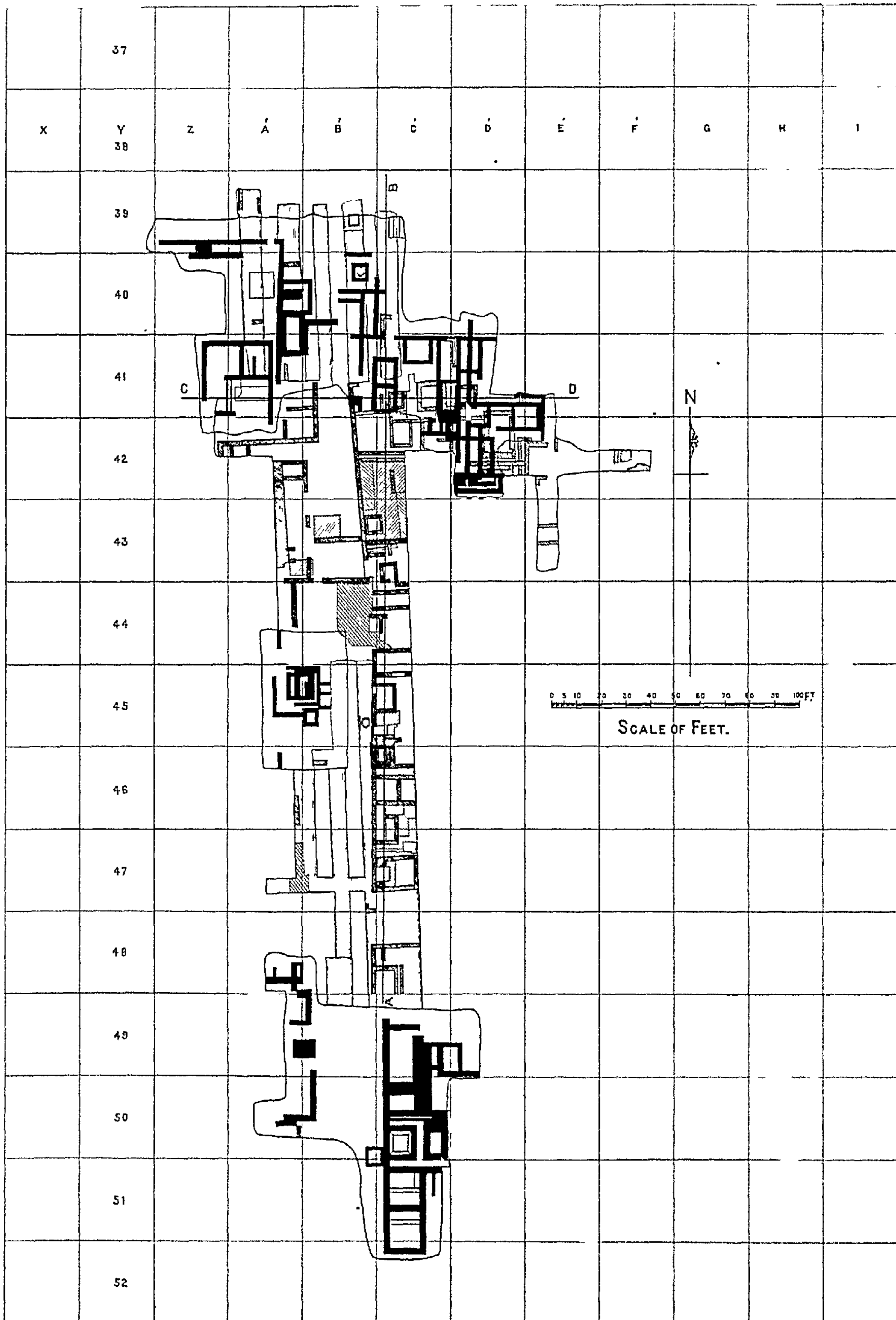
Before passing to a discussion of our individual finds, it is needful to report briefly on the actual conduct of the excavations themselves.

In November 1911, Dr. Vogel, who was at that time officiating as Director General of Archæology, visited Basarh with me, and we together inspected the eight detached excavations left by Dr. Bloch. We found that hardly a brick remained of all the maze of walls he had uncovered. The people of the neighbouring villages had removed them *in toto* in the intervening seven years. This was undoubtedly a fact to be deplored; but when I decided, on Dr. Vogel's advice, to re-commence the excavations here, I found that the depredations of the villagers had solved for me the problem of my starting point in these new operations.

The salient feature of Dr. Bloch's Report, apart from the splendid collection of seals he had recovered, was the comparatively slight antiquity of the remains met with. He had, it is true, found some remains of a period older than the Guptas, but these were scanty and their exact nature or age was indeterminate. The reason for this seemed

EXCAVATIONS AT BASARH. PLATE XL.

GENERAL PLAN OF EXCAVATIONS IN THE SOUTH-EAST PORTION OF THE CITADEL.



to be the fact that he had not dug deep enough. Apart from wells, he does not appear to have gone below ten feet anywhere, certainly not over any extended area. My main desideratum, therefore, was to tap lower strata than those he had exposed, and when I observed that the vandalism of the peasantry had resulted in a thorough clearance of the level of the fourth Christian century, in the area explored by Dr. Bloch, it became evident that this was the place for me to begin my work, because in this portion of the site I was thus enabled to commence my digging, some fifteen centuries nearer to my goal, than would have been possible elsewhere. But inasmuch as Dr. Bloch's excavations had all been of limited extent individually, it seemed desirable, not only to lower the levels he had left, but, where his pits were near together (namely in the south-east corner of the citadel), to connect his three main excavations by trenching through the intervening banks of untouched land. In this way, I hoped to open out connectedly a more extensive area, and thus make possible a continuous plan of this part of the site, in place of the three distinct and separate plans which Dr. Bloch had given us (cf. Plates XL and XLI). Thus our work in the south-east portion of the site was really two-fold; (*a*) the removal of the banks intervening between Dr. Bloch's old excavations, and (*b*) lowering the levels in the three of his excavations which are numbered D, E and F on the plan published by him as Plate XXXIII of the Director General's Annual Report for 1903-1904.

As for the actual method and procedure of the work itself, it would serve no useful purpose for me to seek out other words, in which to re-state the information on this subject, already published in my own Provincial Report for the year in question. I accordingly quote here those paragraphs which detail the progress of the excavations as such, to which I have nothing new to add, and will then proceed to a discussion of the resulting finds.[1]

First of all, the southern edge of Dr. Bloch's northern pit, D, and the northern edge of his southern pit, F, were cleared, to enable my draftsman to join up the three plans with greater accuracy. Some few of the foundations previously uncovered in pit D, were found to have been subsequently reburied instead of having been removed, and these served as connecting links between the old plans and the new one. In addition to these, a number of very small square chambers were discovered on the south of D, and a finely constructed masonry well, which proved to be packed full of pottery.

While the clearance here was going on, a trench was started to connect Dr. Bloch's pit E and the more northerly D, and the level of E as a whole was lowered. A further trench, 22 feet in width, was subsequently led from F on the south to D on the north, and thus a connected plan for this tract was obtained (cf. Plate XL). Trial trenches led to the north from the north-east corner of F did not disclose any important remains, and the intention of making a continuous and complete clearance of this portion of the site was therefore given up.

As regards my intention of exploring the lower levels, the following measures were adopted. The floor of Dr. Bloch's pit E was lowered throughout its area to a depth of some 17 feet from the ground level, and the trench from it to the north, was taken down to even a slightly greater depth. Similarly deep trenching was attempted also at the north-east corner of Dr. Bloch's pit F; and a series of parallel trenches were led

[1] See Annual Report of the Archæological Survey of India, Eastern Circle, for 1911-1912, pages 43 *ff*.

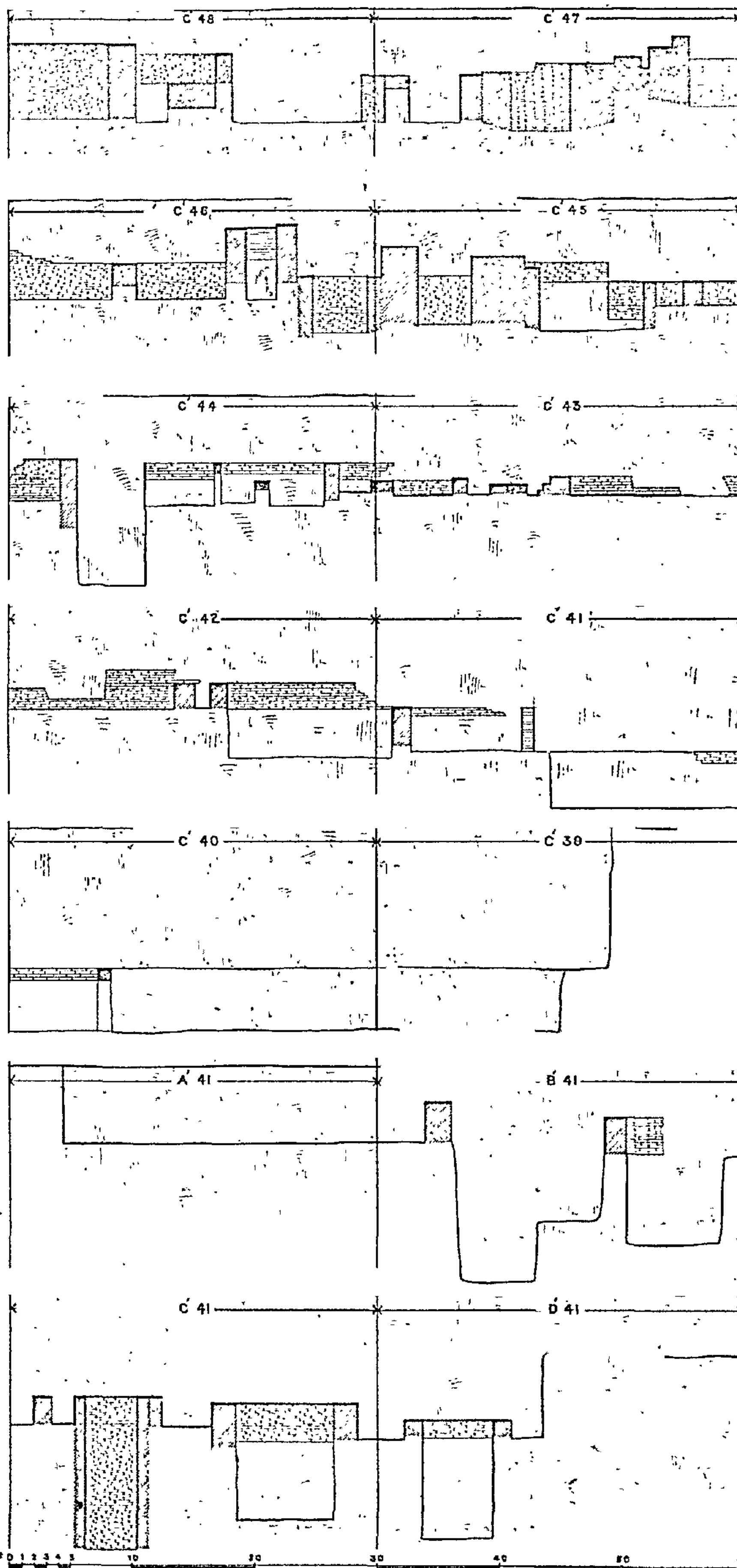
through the old pit D, starting from the level of the former excavations, and running north and south. But we were nowhere able to get through the entire depth of occupied soil. At a few points, a depth of 18 feet or more was reached, and a level closely approximating this was cleared over a considerable area, but below this point the sub-soil water prevented further deepening. Abundant human evidences of one kind or another showed, however, that we were still above the level of the virgin soil even here. Fragments of pottery and other proofs of occupation could be recovered, even when one thrust one's arm down as far as possible through the sub-soil water, in the small trial pits we sank here and there, while at one point, interesting traces of occupation were recovered in conjunction with fairly large shell-fish of some sort, which would seem to imply permanent flooding at this level. I am forced to conclude, therefore, that the sub-soil water level has risen since that period of antiquity, when this fortress was first built, and I fear that an examination of the oldest levels may be a matter of some difficulty, in even the driest season. It is, however, not impossible to excavate profitably even in flooded sub-soil, as has been recently shown at Pāṭaliputra, and the presence of a fragment of dressed sandstone, with the brilliant polish characteristic of the Mauryan epoch, among the shell-fish mentioned above, warrants the hope that some day the excavations here can be continued.

Generally speaking, though, it must be acknowledged that the lowermost levels now opened up for the first time were somewhat disappointing. No monumental remains were found underneath Dr. Bloch's digging in pit D to the north, except one round well and a wall or two of no apparent importance near to it. On the south in pit F, our deepest digging yielded nothing. In pit E the lower levels were more productive, while even at a depth of 16 to 18 feet in the trench leading out of pit E to the north, large numbers of seals and pottery were found. Even pit D was not barren, by any means, as occasional seals and other small remains were met with, and to the east several large square bricks of an antiquity manifestly greater than that of any of the walls uncovered. It is possible that at this point we were in the vicinity of some structure of really great age ; but unfortunately these few bricks were the only traces of it which we found.

The above work was done, as has been already mentioned, in continuation of Dr. Bloch's excavations in the south-east portion of the mound. Over much of this area therefore the upper levels had been removed, and no complete tabulation of finds for this tract is possible. The north-east portion of the site was, however, intact, and here I dug a series of square pits, in order to open out a new portion of the citadel. To enable me to register my finds with precision, while avoiding the crowding of my plan with the registration numbers of the several finds, I had the large scale plan of the site divided into squares like those on a map, lettered along the top of the sheet and numbered down the side, for ease and accuracy of reference. In determining a series of trial diggings across this north-east area, therefore, I marked out on the surface, squares corresponding to the squares on my plan, so that by digging these separately, I could attain greater precision in registering my finds, and greater clarity in this report. In all, eleven pits were outlined in this manner, extending from the north-east angle of the fort wall well toward the centre of the mound, each of the squares being thirty feet to a side. The area opened out by one of these

EXCAVATIONS AT BASARH.

SECTION ON A B. AND C. D. IN 7 SEGMENTS.



pits was thus nine hundred square feet, so that the eleven pits together covered a fairly large area.

In locating them, two objectives were kept in mind ; first, to have the line cross a certain marked depression in the mound, (to see if this was due to the original presence here of any palace courtyard), and second, to have it cross the actual edge of the mound as a whole, so as to lay bare, if possible, part of the main rampart or surrounding wall of the fortress, if any such existed. Cunningham had hunted in vain for this wall in 1880-81, and Bloch with almost equally negative results in 1903-04, but it seemed so improbable that the wall should have disappeared totally that a fresh attempt to find it appeared desirable. My first pit, therefore, was designed to cover the extreme edge of the mound at its north-east angle, but the results were disappointing. We did not, it is true, attain to any very great depth at this point, as the work was begun so late in the season that the pit was only 7 feet deep, when the excavation had to be abandoned. But our absolute failure to find any walling at all, or any evidence of any, except quite superficial modern structures, makes it seem improbable that any ancient masonry ramparts ever did exist. The short stretch of wall six feet thick which Dr. Bloch found to the north-west, was evidently not of ancient date, as its base was too near the surface ; so that the three attempts made so far, to recover the ramparts of old Vaiśālī, have all equally failed, naturally, if no such rampart existed. But whereas we found no walling, we did on the other hand find very noticeably and singularly sandy soil, and this would seem at present to confirm the suspicion that the site had no masonry defences. The sand was apparently thrown up in the excavation of the encircling moat, and from it I am tempted to conclude that an earth embankment was all the circumvallation that the site possessed.

But as all this north-east portion of the citadel was quite untouched when we began our work, it will be expedient to discuss this part of the excavation in more detail. I propose to describe each of the eleven pits in order, therefore, and to publish a tabulation of all finds in each particular square, arranged according to depth of find-spot. So minute a treatment of the area on the south-east is not practicable. A tabulation could be given for those feet of soil which we ourselves examined, but in the absence of a similarly detailed record for the depth removed by Dr. Bloch such tabulation here would serve no special purpose. For anyone continuing my work on the north-east, however, it is hoped that the present form of tabulation will be serviceable, as affording him a complete record of the contents of that portion of the sóil which has been removed. The scholarly bearing of the season's yield of finds will also be apparent from this detailed statement of the work on the north-east (which gave us perhaps the more important of our finds) while necessary particulars of the finds in other portions of the site can be gathered from the Register of Finds accompanying this paper, and the separate Register of Seals, in which all antiquities of this class are considered in minute detail.

Square No. C′ 5.—Beginning, then, with our northernmost pit, in order that the progression may be in regular sequence from north to south of the plan, the first square to be discussed is No. C′ 5. The absence of walling and the prevalence of sand observable at this point, together with the deductions therefrom which I would suggest, have been noticed above. The finds remaining to be mentioned are very

few, and all of very minor interest only. The first occurred at a depth of 2′ 7″, and consisted of four articles, *viz.*, two pottery cups of 4″ diameter (Register No. 654), the leg and foot of a terracotta statuette (No. 646), and a mould of terracotta (No. 644) resembling, I am informed, those used by goldsmiths at the present day. An earthen jar 2″ high (No. 692) was found 3′ 4″ deep associated with a small *makara* head in terracotta (No. 691) and the heads of two terracotta figurines (Nos. 690 and 707). The larger of these is $5\frac{1}{4}$″ in height, and both are so strikingly similar that they appear to have been made from the same mould, although No. 690 is so badly worn that one cannot be certain. Both are roughly modelled, with prominent lips, obtrusive nose, and strongly pointed chin, and both show an ornament on the forehead which resembles a crescent moon with a surmounting star or boss. Certain affinities with Gupta work are apparent, but if the figurines are so ancient, which appears improbable, they can hardly date from other than the decline and fall of Gupta art. A clay amulet (No. 715) of no importance was the only other find at this level; and as nothing else was met with down to a depth of seven feet, the maximum attained here, the finds from C′ 5 may be tabulated as follows :—

Depth 2′—3′—

Pottery No. 654.
Terracotta No. 646.
Brick No. 644.

Depth 3′—4′—

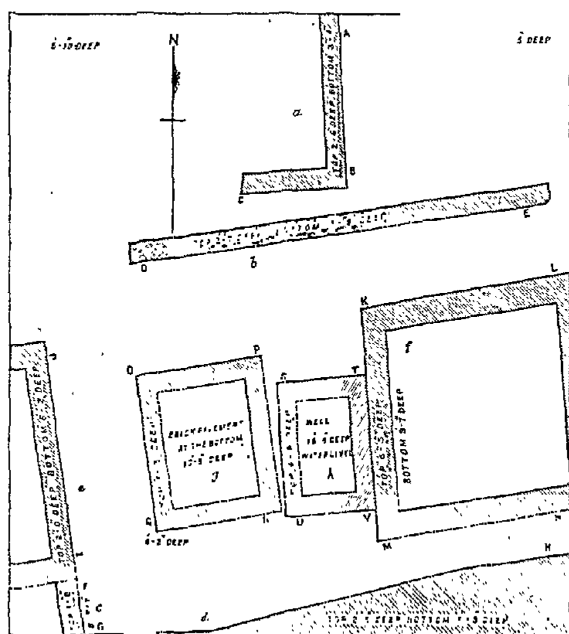
Pottery No. 692.
Terracottas Nos. 690, 691, 707.
Misc. No. 715.

Square No. B′ 7.—The plan of square No. B′ 7 is published with this paper [Plate XLII (a)]. From this it will be seen, that a number of walls were met with, but they are fairly superficial as regards depth, and such excavation as was possible in the time at our disposal did not suffice to disclose their original purpose or significance. The wall shown at the north side of the pit, running south, with a right-angle turn, to the west, is the nearest of all to the surface, as it rises from a depth of only 3′ 4″, but this wall consists of only a few courses of brick, beneath which is free earth. The long east and west wall just south of this is only five inches deeper at its base, and consists of only three to five courses of brick. At about this same depth or a trifle higher (*i.e.*, 3′), occurred an earthen jar 5″ high (No. 704), which lay in the north-east corner of the pit, and two terracotta figurines. Of these, No. 657, is the torso of a statuette, badly worn away but showing a large wig and earrings, which was found near the western end of the long east-west wall. The other, No. 662, which was found at the same place, is a crude female figure of absurdly disproportionate length, and is so badly worn that no details are preserved. These two terracottas do not suffice to date the walls at this level. The next wall met was the short stretch in the south-west corner of the pit, which rises from a depth of 5′ 7″, just two inches higher than the long irregular wall extending from it to the east or north-east. This wall shows twelve courses of brick, the bricks measuring 12″ × 9″ × 2″.[1] About the same depth, 5′, were found four pieces of

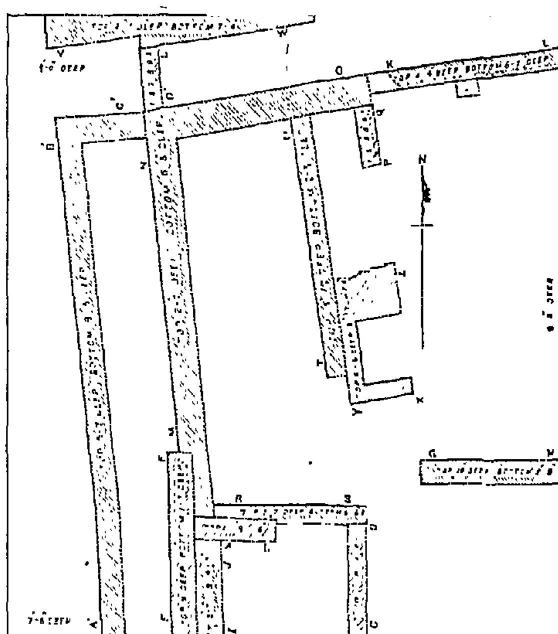
[1] Bricks of this size at Saheth Maheth were assigned by Sir John Marshall to the vii or viii century, A.D.; cf. A. S. R., 1910-1911, p. 23.

EXCAVATIONS AT BASARH.

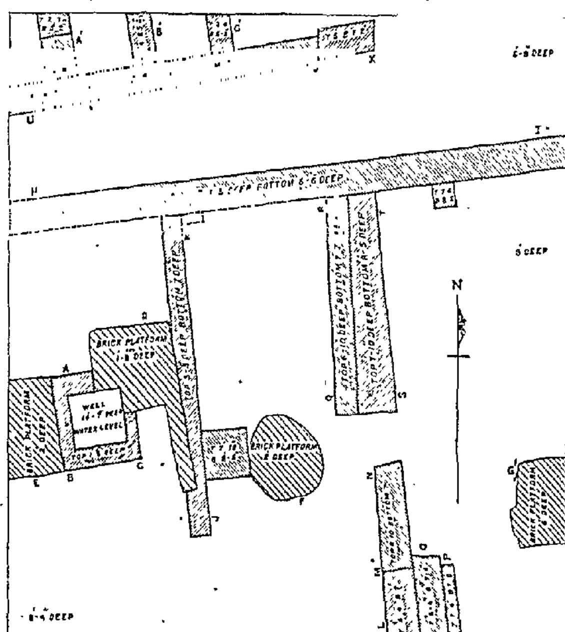
a, PLAN OF PIT NO. B. 7.



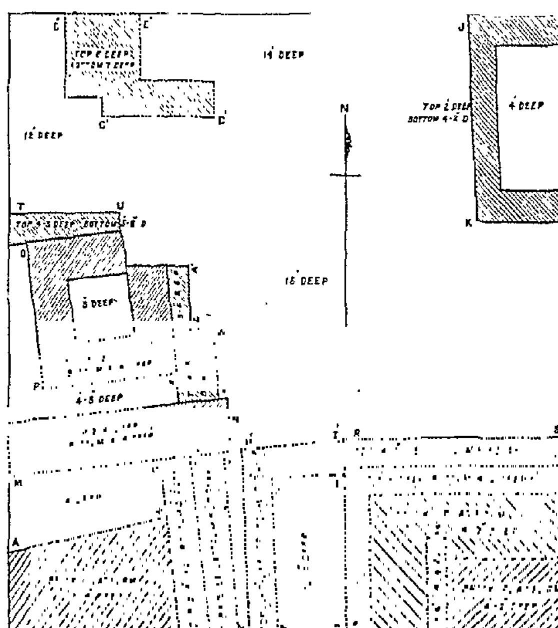
b, PLAN OF PIT NO. A. 9.



c, PLAN OF PIT NO. Y. 13.



d, PLAN OF PIT NO. S. 25.



pottery (Nos. 785, 787 and 793), but none of these lay near the walls in question. The next wall met is the one in the south-west corner, which appears to be the eastern wall of some building lying to the west of the edge of our trial excavation and which rises from a depth of 6′ 2″. Near this wall, but only 5′ 3″ deep, two earthen cups occurred (Nos. 788 and 789), and in the north-east corner of the pit, underneath the eastern end of the wall D—E, at a depth of 6′, were found three other cups (No. 809), and at the same place, a trifle lower, two small earthen jars, numbered 817 and 819. Two earthen jars, one piece of pottery shaped like an hour-glass, 2½″ in height, probably the frame of a toy drum, and four earthen cups (Nos. 724, 725, 726 and 727 respectively) were all found between six and seven feet deep, inside the square paved pit lettered OPQR, where the pavement is 10′ 8″ deep. As this appears to have been a sunken receptacle of some kind, it is doubtful if the bottom of the wall, in this case, is so significant of age, as the top, which lay only 1′ 3″ below the grass. Within this structure, at lower levels down to 9′, occurred 33 other pottery fragments, none of which are at present determinable. They are numbered 735 to 738 in the register. The only *seal* found in square B′ 7 was No. 825 (Plate L), which lay in the north-east corner of the square building lettered KLMN, whose walls descend to a depth of 9′ 7″. This building presumably goes back to Gupta times, to judge from the depth from which it rises, but the seal itself lay only 7′ deep, and is a damaged specimen on which no lettering occurs. The device is a well modelled humped bull reclining to left, the head of which has failed of impression. But there is no reason to doubt its belonging to the Gupta period.

The tabulation of all finds for B′ 7 is thus as follows :—

Depth 3′—Pottery No. 704.
Terracottas Nos. 657, 662.
Depth 5′—Pottery Nos. 785, 787, 793.
Depth 6′—Pottery Nos. 788, 789, 809.
Depth 7′—Pottery Nos. 724-727, 817, 819.
Seal No. 825 (Plate L).
Depth 8′—Pottery Nos. 735, 736.
Depth 9′—Pottery Nos. 737, 738.

Square A′ 9.—The extent of walling met in square A′ 9 requires the publication of the plan : see Plate XLII (b). The walls occur at greatly varying depths, from the short wall A-B on the south, the bottom of which is only 1′ 6″ below the surface, to the still shorter wall D′-E′ on the north, whose base is 9′ 3″ deep. The most prominent one is lettered MNO, which contains eighteen to nineteen courses, and rises from a depth of 6′ 3″. The long wall west of this, lettered A′ B′ C′, goes down to 8′ 5″. In the north-east corner of the square, at a depth of only 3″, occurred one of the very few coins, recovered this year (No. 511). This is one of the " Anonymous Circular Cast Coins " mentioned on p. 202 of Mr. Vincent Smith's *Catalogue of the Coins in the Indian Museum Calcutta,* and is of the chaitya and elephant type illustrated in fig. 3 of his Plate XXIII, where the obverse shows a three-arched chaitya with crescent above, and the reverse an elephant to left. But inasmuch as all these coins are referred by Mr. Smith to the period before 200 A.D., the occurrence of the present specimen only 3″ below the surface must be looked upon as accidental. Indeed, the great depth at which several

specimens of this coinage have recently been found at Pāṭaliputra would suggest an even greater age than 200 A.D., the second or third century before our era, being implied, rather than any later period. In the same portion of the square, was found a fragment of beautifully dressed and highly polished black stone (No. 522) only 9″ deep, and also, at 1′ 4″ deep, a fluted ear-stud or button of terracotta. In the south-west corner, 1′ 10″ deep, occurred pottery fragment No. 571, while the only *seal* found lay east of the wall C-D at a depth of 2′ 10″. This seal, No. 651 (Plate L), shows unfortunately no lettering, but its device is not lacking in interest. Dr. Bloch seems to have found a duplicate of it, which he numbered 127 (on p. 119 of the A. S. R. for 1903-1904) and illustrated as fig. 54 on Plate XLII. His specimen, however, does not appear to have been in quite such good condition as our present example, and seems to have been thereby obscured. The illustration shows the seal in what would seem to me an inverted position, and Dr. Bloch calls the device a " Spade-like object, reversed triangle in centre, top ends into dotted lines ; small flag attached to lower right side of handle and circle on left side." This " small flag " appears on our present specimen with certainty as a crescent moon to right, above the emblem, so that the superior condition of No. 651 enables us to place the seal aright.[1] It then becomes apparent that both these Basarh seals are essentially identical with the larger and finer specimen published by Sir John Marshall as No. 116 of the Bhīṭā collection, pictured on Plate XXI of the A. S. R. for 1911-1912. This, Sir John describes as showing a " Symbol resembling monogram on copper coins of Azes, which General Cunningham interprets as meaning Kaspapura or Multan. Near top of symbol, crescent and star." For the monogram Sir John refers to *Coins of the Indo-Scythians*, Pt. I, No. 15. This is thus the most complete description possible of all three seals. But to visualize the design, one must imagine a large tub-like receptacle with an upright staff in the centre. Across the middle of this staff is a triangle (point upwards), whose sides are projected to right and left beyond the apex, and culminate in ornamental balls, below which, in the present Basarh example, minute flags or pennants are visible ; crescent and star above, to right and left respectively. But in cases like this, no amount of verbal description can take the place of illustration. Azes I is dated by Vincent Smith c. 90-40 B.C. and the occurrence of his monogram on these seals might have inclined us to assign them to this early period, had not Sir John fortunately provided us with a most useful bit of corrective evidence, in the form of yet another seal in the Bhīṭā collection, which shows not only this self-same device, but also part of an inscription. Originally a royal seal, the name of the king might have helped us to an exact dating if it had only been preserved. It, however, has been lost, and only the titles *Bhaṭṭāraka Mahārājādhirāja* are now traceable. Even so, the form of the aksharas suffices to place the sealing in the 2nd or 3rd century A.D., which would thus seem to be the most probable period for all the four seals of this type we have recovered. Moreover, if General Cunningham's interpretation of the symbolism is correct, and our seal was really attached to a sending from Multan, the fact is of special interest also in connexion with another seal in this collection, No. 607 : but we must postpone our discussion of this important seal till page 79, q. v. Five pottery fragments were found at various points between 3′ and 4′ deep (Nos. 664-667

[1] By a strange fatality my own specimen has also got misplaced in the process of making up the plate and appears in Pl. L lying on its side. What is there the left side should be the top.

and 676), and four cups of 4¼"diameter (No. 818), at the western end of the wall K-L, buried 6′ deep. At the same point, but a few inches higher in the soil, was found a blue bead (No. 790), and toward the east end of the same wall, an ear-stud made of bone or ivory, No. 794, also 6′ deep. In tabular form the finds appear as follows:

Depth 1′—Coin No. 511.
Misc. No. 522.
Depth 2′—Pottery No. 571.
Misc. No. 542.
Depth 3′—*Seal* No. 651 (Plate L).
Depth 4′—Pottery Nos. 664-667, 676.
Depth 6′—Pottery No. 818.
Bead No. 790.
Misc. No. 794.

Square No. Z 11.—No walls of any significance were found in pit Z 11. The few which do occur are only of one or two courses of brick, and extend over short stretches only. Five rough brick platforms of irregular outline exist at varying depths, 5′ 3″, 5′ 5″, 5′ 7″, 6′ 9″, and 7′ respectively, but the meaning or purpose of these is not apparent. There is no evident relation between them and any of the very slight walls met with. The objects found nearest the surface were a clay dice, No. 503, and a perfectly smooth, undecorated terracotta disc shaped like a wheel but apparently used as a spindle whorl, No. 506. Both of these were only a few inches deep. At 1′ 5″ and 1′ 8″ respectively two terracotta heads were found, the former (No. 529) about the middle of the west side of the pit, the latter (No. 530) a little north-east of centre. No. 529 is only 1½″ in height and represents a female (?) wearing a full wig and prominent earrings; No. 530 is 3″ high and is exceedingly crude. A second clay dice, No. 555, was found in the same area as terracotta 530, at a depth of 2′ 3″ while in the vicinity of head 529 a rather neat elephant in terracotta appeared at a depth of 3′ 10″. The elephant's back is even exaggeratedly sloping, and the space between the fore and the hind legs is a simple circle. The details are largely effaced, but the modelling is by no means bad, being, in my judgment, far superior to that of most elephant toys at home. It is 2¼″; high and 2½ in length. Close beside it was a curious pottery vessel (No. 675), typical of several met with in these and other of my excavations. The dish is circular and has a rounded bottom, while around the upper edge there is a wide, projecting rim. Our present specimen is 3″ high and 6¼″ in diameter over all, but the opening in the centre measures only 2½″. To me these objects seem most curious, and I can offer no sure explanation of them. The fact that they cannot stand upon their bases would seem to suggest that they are not intended for use in that position, and the only alternative would appear to be that they were inverted and used as covers to large jars. A single earthen jar (No. 585) 2½″ high, with a diameter of 3″ was found a little to the north of this, 3′ 3″ deep. In the centre of the western side of the pit, where an oblong brick platform lies 5′ 5″ deep, was found, at a depth of 4′ 10″, the only *seal* yielded by this square. This seal, No. 708 (Plate L), is a very excellent and typical example of the Gupta sealings from Basarh. The clay on which the two impressions occur is a flat, round piece, the reverse of which shows clearly the outline of the narrow, flat document to which it was affixed, as well as the marks of the string or fibrous cord with

which the document was tied or fastened. The two impressions are both upon the obverse. The larger or more prominent of these has a circular area $\frac{7}{8}''$ in diameter. The field is divided horizontally by two closely parallel lines, above which occurs, in the centre, an urn or jar (*kalaśa* or *ghaṭa*), containing as decoration, three flowering branches, the whole device being flanked on either side by two small conch-shells (śankha). The legend which is in characters of the Gupta period, occurs in the lower half of the circular face and reads *Kulika-Dhaṇasya*, (seal) of the Kulika Dhaṇa. Dhaṇa is presumably a proper name, and Kulika a descriptive epithet. But the meaning of this epithet is not determined. Dr. Bloch understood it to denote a merchant, and accordingly interpreted the nine specimens of this particular seal of ours which he recovered at Basarh as seals of the merchant Dhaṇa (see A. S. R. 1903-1904, p. 114, No. 73). I find, however, from Sir John Marshall's Bhīṭā Report (A. S. R. 1911-1912, p. 56, apropos of Seal No. 55), that this rendering has been made doubtful by Dr. Vogel's discovery of the word *kulika* among lists of State officials in Chamba, where Dr. Vogel thinks they may have been a special tribe employed as captains of mercenaries (cf. *Antiquities of Chamba*, Vol. I, p. 114). About Chamba, of course, I know nothing; but it seems worth noting that the kulika-seals at Basarh almost invariably do show that particular device which is characteristic of commercial guild seals where we have such definitely commercial terms as *sārtthavāha* and the like, and that the word *kulika* itself occurs on such a seal in a compound of these commercial terms, compare No. 29 of Bloch's Report, p. 110, where we have the samāsa *Śreshṭhi-Sārtthavāha-Kulika-Nigama*. I must say this seems to me good evidence for Dr. Bloch's interpretation. The expression "Bankers, traders and merchants" is a homogeneous and consistent compound; "Bankers, traders and captains of mercenaries" would seem to involve an incongruity. For the Vaiśālī documents, the meaning *merchant* seems appropriate. Is it not possible that the term has local significance in the Chamba grants? Dr. Bloch's examples of our seal 708 were generally combined with another sealing, that of Bhavasena. Ours, on the other hand, is associated with the seal of Varāhadatta. The area in this seal is a long oval, $1\frac{1}{8}'' \times \frac{5}{8}''$ and the device is what is called a decorated wheel. Below this is a line, below which comes the legend. The fact that the name is in the nominative is worthy of attention. The genitive is the customary case. On the same level with this seal, which I would refer to the fourth century on the basis of its lettering, occurred a round bead, reddish brown in colour, spotted with white (No. 720), and three terracotta heads. Of these, Nos. 717 and 747 are both about 4″ high, and of coarse workmanship. No. 717 wears a curious peaked cap, ribbed vertically, No. 747 a flat headdress of uncertain nature. Are these, strictly speaking, Indian? In both, the eyes are indicated by small incised circles, which give them a curious staring expression, and both show, in the middle of the forehead, a small circle something like a *tilaka*. No. 757, the third of these terracottas, is of a distinct type, being the head and shoulders of a much smaller figurine wearing an extraordinarily high pointed headdress and immensely large circular earrings. A *chirāgh* (No. 754) with a little stand, and an ordinary earthen jar 3″ high (No. 705) were the only pottery fragments between 4 and 5 feet deep where this seal occurred, but a dozen specimens (Nos. 765, 766, 767 and 791) were found at 6′ or a trifle over. Two round beads, black, banded with white (No. 797), and a greenish white, flat, rectangular bead, pierced lengthwise

and having the long edges bevelled (No. 816) were found 6′ 3″ and 6′ 6″ deep respectively, and one earthen cover, two cups and a tiny jar were found a little lower down (Nos. 774, 801, 822). A broken clay mould, of indefinable nature (No. 812) completes the list. It was found 6′ 6″ deep. For Z 11, therefore, the tabulation of finds is:

Depth 1′—Misc. Nos. 503, 506.
Depth 2′—Terracottas Nos. 529, 530.
Depth 3′—Misc. No. 555.
Depth 4′—Pottery Nos. 585, 675.
Terracotta No. 674.
Depth 5′—Pottery Nos. 705, 754.
Terracottas Nos. 717, 747, 757.
Seal No. 708 (Plate XXIII).
Bead No. 720.
Depth 6′—Pottery Nos. 765, 766, 767, 822.
Beads Nos. 797, 816.
Misc. No. 812.

Square No. Y 13.—Y 13 disclosed a number of walls of predominatingly Gupta age, to judge by the levels from which they rise, and a plan of the square is accordingly published with this paper (cf. Plate XLII, *c*). The main wall is the one H-I, which runs roughly east and west across the whole pit, a little north of centre. The bottom of this wall is 6′ 6″ deep, and it is presumably to be referred to Gupta times. The only significant find at closely the same level was a terracotta, No. 773, being the head and shoulders of a tiny figurine, also of Gupta character. There appears to be no chronological connexion between the long wall H-I and the three walls, J-K, Q-R, and S-T which run to the south from it, as these are all of different depths, *viz.*, 7′, 7′ 7″, and 8′ 5″ respectively. The finds unfortunately do not serve to differentiate these or any other of the walls, and they need hardly be cited individually. At a depth of 2′ 7″ a three-legged metal stand, circular, and with fluted edge, such as is now used to hold the Saligram, was found in good condition at the western end of the wall H-I; and an interesting hollow terracotta duck or hen, No. 813, 3″ in height, and 3″ long, was found 7′ 6″ deep at the north end of the wall Q-R. Altogether 25 pieces of pottery were recovered, the majority between four and five feet deep, with nearly as many between seven and eight feet. But they were scattered over the whole area, and are not themselves dateable. The total yield of the pit may therefore be shown as follows:

Depth 3′—Terracotta No. 599.
Bead No. 570;
Misc. No. 577.
Depth 5′—Pottery Nos. 679-683, 687, 696.
Wheel No. 698.
Bead No. 697.
Depth 6′—Terracotta No. 750.
Depth 7′—Pottery No. 781.
Terracotta No. 773.
Depth 8′—Pottery Nos. 775, 803, 805, 806, 814.
Terracotta No. 813.

Square No. X 15.—No walls of any kind were met with in X 15, curiously enough, save one short stretch of three courses only, buried 2′ 3″ deep in the south-east corner of the pit. Two *seals* were found, one, No. 494 (Plate XLIX) about the centre of the southern edge, only 3″ deep, the other, No. 575, 2′ 6″ deep, just west of the centre on the northern edge. No. 494 is badly worn, but appears to show, in an oval area, the head and shoulders of some person, with close cut hair, apparently a female; but the condition of the sealing does not permit of certainty. There is no lettering. No. 575 (Plate XLIX) on the other hand, has no device, but a legend of four aksharas which I propose to read as *Bhavanasya,* (the seal) of Bhavana. The written surface of this sealing is a deep concave. Of the terracottas, No. 533, which is of fine, smooth texture, is the headless figure of a female, 3″ in height. The figure is well draped, and the pose is pleasing and natural, with the left hand resting easily on the hip. It was found 1′ 6″ deep, just west of the centre, along the north edge of the pit. In the north-west corner, 3′ 3″ deep, occurred a quaint terracotta fish on a pedestal, No. 660, measuring 2¼″ in height and 3¼″ in length. The scales are cleverly indicated by bands of incised semicircles, and the whole is well modelled and very naturalistic. Nos. 693 and 742 are two rough terracotta heads showing precisely the same peculiarities as the heads 717 and 747 already described among the finds of Z 11, but No. 693 was only 3′ 9″ deep, while No. 742 was 5′ 3″ below the surface. Fragment No. 741, however, which is the curved handle of some vessel, is quite the most interesting of the finds from X 15 (cf. Plate XLIV, *c*). It occurred at a depth of 5′, south of the centre, on the western side of the pit, and is decorated with the head and shoulders of a female, whose hands are clasped between the breasts. The headdress is elaborate, as are the earrings. Of the five beads from this area, Nos. 780 and 796 were found 6″ deep. The former is long and flat, made of greenish-yellow glass, apparently, the latter is of white quartz cut in facets and pierced lengthwise. The others, Nos. 782 and 786, were all 6′ 3″ deep; under 782 are registered two carnelian beads, banded with white, while No. 786 is a clay bead or amulet. The pottery fragments were fairly numerous, but call for no detailed mention.

Depth 1′—*Seal* No. 494 (Plate XXI).
Depth 2′—Pottery Nos. 543, 547, 549.
Terracotta No. 533.
Misc. No. 551.
Depth 3′—Pottery Nos. 586, 616.
Seal No. 575 (Plate XXII).
Depth 4′—Pottery No. 659.
Terracotta Nos. 660, 693.
Depth 5′—Terracotta No. 741.
Depth 6′—Pottery Nos. 762, 763.
Terracotta No. 742.
Beads Nos. 780, 796.
Depth 7′—Pottery Nos. 784, 792.
Beads Nos. 782, 786.

Square No. W 17.—W 17 disclosed no walls, but yielded a number of finds of considerable variety, including an unusual lot of beads and miscellaneous articles, as well

as two seals of exceptional interest. The pottery fragments, as can be seen from the subjoined tabulation, were very evenly distributed through the earth, from a depth of 1′ to 7′. The terracottas are singularly few, only Nos. 641 and 642 from a depth of 3′, and No. 617 from a foot lower down. The two former are crude, and of the same class as Nos. 717 and 747 in Z 11, and Nos. 693 and 742 in X 15, but there the incised circle for the eye, marks the pupil of a raised eyeball, instead of the eye as a whole. No. 617 is a little larger, and is a more carefully modelled head. The face is smiling, and the resultant curvature of the cheeks is very cleverly executed. At a depth of 3′ a *signet*, No. 671, was met, just south of the centre, on the west edge of the pit. It has a circular face, 1⅛″ in diameter, the device being a *kalaśa* without legend. Four inches higher in the soil, just east of the centre on the northern edge, lay *seal* No. 624 (Plate XLIX). The area is circular, with a diameter of ¾″, and the device is a full and graceful urn or *kalaśa* with one flower with two tiny crescents to left and right just above the shoulders of the jar. Below is a short thick line or pedestal. This device takes up some three quarters of the entire area, and the legend is crowded into the space below. It contains six Gupta aksharas, which are not absolutely clear. I read it *Mahākaśikasya*, but the vowel quantities are uncertain, and I am not sure about the initial *ma*. Vastly more interest and importance attaches to *seal* No. 800 (Plate L) which was found a little south-west of the centre of the pit, at a depth of only 6′ 3″. The clay shows only one impression, with a square area (which is unusual) measuring 1⅜″ to a side. Along the top occur five aksharas, *ve, sa, li, a* and *nu*. In the space below these and taking up generally the middle of the seal, are three (or four ?) very archaic symbols. Below this again are three more aksharas, unevenly spaced and smaller than the upper five, which I read as *ṭa, kā* and *re*. Underneath all, along the lower edge of the seal, come four more letters *saṁ, yā, na* and *ka*. Now there seems to be no doubt at all but that the aksharas in the top line are to be read in connexion or conjunction with those of the bottom line. This is externally suggested by the fact that both these lines occur along the edges, and by the similarity in size of the aksharas, the aksharas in both these lines being markedly larger than the three irregularly spaced ones in the centre. The fact that the first line ends with a preposition, *anu*, and that this cannot be joined up with the medial aksharas and can be with those along the bottom edge, settles the matter to my mind, and I have no hesitation in reading the whole as :

Vesāli-anusaṁyānaka-ṭakāre.

But the interpretation of this legend, after it is read, is by no means easy. The word *anusaṁyānaka* is not known to the Sanskrit dictionaries, and although I had my own ideas in regard to it, I could not feel quite certain that they were right, and ventured to consult with certain of the more distinguished and experienced scholars in consequence. For the manifest age of the lettering, which I assigned at first to the third century B.C.,[1] added some importance to the question. I am indebted to Dr. Fleet for the following note, in which his own views are given. Dr. Fleet

[1] Mr. Rakhaldas Banerji of the Indian Museum disputes this date, which has been very generally accepted, on the score of the initial *a*, which he says shows that space between the two tangents on the left which is characteristic rather of the first than the third century B.C. The point is well taken, but it seems to me that the whole character and appearance of the seal are opposed to so late a date.

writes :—" The seal is a decidedly interesting one. I see no objection to referring it to the Mauryan period. The first syllable must be *vē*, I imagine, rather than *vai* [as I at first restored the missing vowel inadvertently: of course Dr. Fleet is right]. The word *anusaṁyāna* means 'a tour'. It occurs in the third rock-edict, where Aśoka directs certain of his officials not 'to go on a tour every five years', but 'to make a (complete) tour (throughout their charges) in (the course of) every five years (cf. JRAS 1908, page 821). The reference is to the five years cycle by which the calendar of that period was regulated, and to a system of periodical inspections analogous to that which we have now in at any rate the Bombay Presidency, where every Commissioner, Collector, and Assistant or Deputy Collector is required to visit every part of his charge, in the course of a period which varies according to his grade and the extent of his charge. If, as seems quite reasonable in this case, line 1 runs on into line 3, the legend will be *Vēsāli-anusaṁyānaka* (for *kē or *kā) : 'the touring officer or officers, of Vēsāli'. *Ṭakārē* may be, as you observe, the locative case of a placename, marking the camp at which there was written the letter to which this seal was attached. In that case, however, a separate new seal must have been made at each place from which any letters were sent ; and such a procedure seems rather peculiar." To my own mind, the difficulty to which Dr. Fleet here draws attention would seem almost if not quite insuperable, and I almost wish he had not accepted my proposal to treat *Ṭakārē* as a place-name, but had given us a wholly independent and dissimilar interpretation of it. With *Ṭakārē* the name of a place, it seems impossible to accept the explanation of the whole which Dr. Fleet so kindly proposes, and I reluctantly abide by my own first rendering which will be noted later. For the present I wish to quote a second scholar, who has been good enough to devote attention to the question, and who differs from me still more radically. He proposes to read the legend :

vāsā 30 *anusaṁyānakālē katē*

which he explains as meaning *thirty years* (have passed); (seal) *made at the time of the quinquennial inspection*, understanding by *anusaṁyāna* a tour at quinquennial intervals. The letters *kā-le*, he says, seem to have been omitted at first by an oversight and afterwards to have been inserted above the line in reduced size, the *le* having suffered in the process. He further suggests that if the second line is to be read *ṭakārē* beyond all doubt, as appears to me necessary, from my study of the original, the legend would run :

anusaṁyāna-kaṭaka-ārē

and would seem to mean *at the top of the hill* (?) (or *camp* ?) *where the anusaṁyāna was held*. In making this ingenious suggestion, my friend was not aware of the fact that, by a coincidence or otherwise, the findspot of the seal was actually the corner of the fort or citadel, where a camp for one of the quinquennial inspections might very conceivably have been located. Nevertheless, I cannot bring myself to believe in either of his renderings as probable. Against the latter the same argument holds as against Dr. Fleet's proposal in regard to *Ṭakārē* as a place-name in his context. Here again the special cutting of a seal-die for a special camp is involved. There is

not the same objection to the former proposal, '(seal) made at the time of the quinquennial inspection', for it may well be that special seals were cut for these inspections, just as special stationery was issued for the Delhi Durbar not long ago. But there is still, to my mind, an almost equally cogent reason for hesitation in the fact that no parallel can be adduced for any such legend on an Indian seal. We already possess extensive collections of ancient seals, and a remarkable constancy in the form and character of their legends is everywhere observable. Apart from an option between the nominative and the genitive, which is attested, it would be reasonable to claim that no variation exists as regards the phrasing of such epigraphs. It therefore seems to me dangerous to assume that the present seal is a unique exception, in this respect, among all the hundreds of ancient sealings known to us. A further consideration leading to the same conclusion is what I cannot help feeling to be the somewhat arbitrary way in which the three aksharas *ṭa* and *kā* and *rē* are distributed in my friend's reading. But queer mistakes in ancient epigraphs are of course abundantly familiar to all scholars, and I would not attach undue importance to this point. As for constructive criticism, the best that I can offer is prosaic in comparison with the more tempting suggestions we have just considered. I read the legend as does Dr. Fleet,

Vēsāli-anusaṁyānaka-Ṭakārē

but to my embarrassment, I cannot see any allusion to Aśoka's tours in it. The only occurrence of *anusaṁyāna* is in the Aśoka inscriptions, to be sure, but am I not justified in thinking that *anusaṁyāna* and *anusamyānaka* are not necessarily one and the same? That they must have a common derivation and similar meaning seems certain. But if the context in the Aśokan document shows us that here the root *yā* with *anu-sam* must in noun formation mean a *tour*, so here it seems to me the context (by which I mean the word *Ṭakārē*, and the nature of the document), precludes this meaning for the new formation. The root *yā* with the prefixes *anu* and *sam* is given in Monier-Williams's Sanskrit Dictionary as meaning 'to walk up and down as a guard', with reference, so Dr. Sten Konow informs me, to Rāmāyaṇa II 79, 13: *rak hiṇdś chānusaṁyāntu pathi durgavichārakāḥ*. On the basis of this passage and this definition in Monier-Williams, I propose (Dr. Konow thinks, wrongly) to take *anusaṁyānaka* as a noun formation from this verb in the sense of *a patrol*, a police guard which walks up and down or rides about like our mounted patrols in India to-day. Taking *Ṭakārē* as a locative of place, (an interpretation which Dr. Fleet and Dr. Konow both accept), I would interpret the whole as

(seal of) the Vāiśalī Police at Ṭakāra (Outpost).

We know how local thanas to-day are subordinated to larger metropolitan centres, and there is no reason to suppose that the same conditions did not obtain in ancient timesr I take the seal, therefore, to be simply that of a local sub-station of the metropolitan police force of Vaiśāli, and to have been affixed to some document sent in from Ṭakāra (which must, of course, have been somewhere in the near vicinity), to the headquarters office in Vaiśālī, where it was found by us, after a lapse of two millennia. I am, as I have noted, aware of the prosaic nature of this suggested rendering in comparison with

the other theories which have been formulated, but is not the very simplicity of my version an argument in its favour? My reading at least does no violence to probability, and involves no breaking from the usual form of seal-inscriptions in point of phrasing or construction. I therefore put it forward for what it may be worth. The scholars quoted above refuse to accept it, for reasons I have shown, but it is only fair to myself to record, that several other authorities could be named, who are more favourable to my views. Certainty of interpretation in such a case is hardly to be hoped for, where there is next to no context to guide one, no precise parallel known, and a word involved which is not quotable in literature. But I cannot avoid the feeling that in such a case, the simplest, most straightforward and commonsense rendering is the most likely to be right.

Turning now from the consideration of the legend on this important seal, which is perhaps the most interesting of all the few seals of this archaic period which have come down to us, let us examine the symbols on it. About the middle of the right side, just underneath the syllables *anu*, we see four small hollow circles connected by diagonals. This is the so-called Ujjain symbol, familiar on coinage. A little to the left of this, about the centre of the area as a whole, we see another and smaller symbol, laid on its side. In general appearance this resembles a scorpion, with long tail curving to right (*i.e.*, upwards, as we hold the seal). It has been suggested to me, however, that this apparent tail has no special connexion with this emblem, but that it is in reality to be limited to, or connected with, the symbol higher up, and to the left. This leaves the symbol which we are discussing, reduced to a sort of crescent joined by a short neck to a circle, and this a friend interprets as the Nandipada. He may be right. If it were not for the so-called neck (which is hardly perceptible), I should be equally inclined to take it as a taurine. But whichever it is, it is of strikingly archaic character, too archaic, I should suppose, to admit of Mr. Banerji's first century date. The same is true of the other symbol higher to the left. The illustration (fig. 800 of Plate L) will show the form of this better than any words of mine could do. Its nature and significance are alike unknown. But its great antiquity is hardly to be doubted.

A word is also due to the singularity of the spot at which the seal occurred. It is certain that at Basarh a depth of 6′ 3″ does not bring us to Mauryan times or anything approximating to them, and none of the other finds from W 17 are of so great an age. Had they been in harmony with the seal, some general disturbance of the soil at this point might have been indicated, but this does not appear to be the case as regards this particular square. It is, however, possible that the soil in the neighbourhood has been so disturbed. There is a hollow or depression a little to the south of W 17 which may mark the position of some old tank dug at some intermediate point in the occupation of this site. The finds in U 21 and V 19 are such as to suggest that the upper strata from the normal surface down to the Śungan or Mauryan level have been removed and it is thus possible that our present seal was brought up to the level where we found it at the time of this tank-excavation. But certainty on the point is not obtainable.

Of the eight beads found in W 17, distributed through the soil between one and seven feet of the surface, three deserve special mention. No. 638, found 2′ 10″ deep, is of unusual beauty in its present condition, being of rough, light-green glass, in facets

EXCAVATIONS AT BASARH.



a. (190)



b. (532)



c. (335)



d (217)



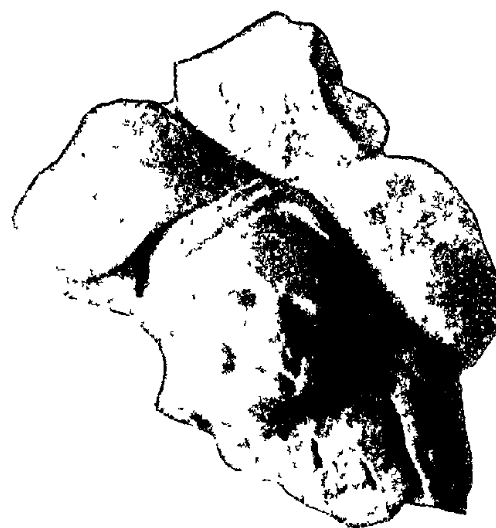
e (425)



f. (827)



g. (308).



h (721).

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splendidly iridescent. Nos. 652 and 655 both from a depth of 3′ 4″, are exceptionally large, fine crystals, $1\frac{1}{8}''$ in length, six-sided, and pierced lengthwise. Both are remarkably fine beads, of a class distinctly superior to the majority from this site.

Omitting a discussion of the miscellaneous finds from W 17, none of which are of sufficient importance to justify an extension of this already lengthy paragraph, I will proceed at once to the tabulation for this square:

Depth 1′—Pottery No. 497.
Bead No. 508.

Depth 3′—Pottery No. 694.
Terracottas Nos. 641, 642
Seal matrix No. 671.
Seal No. 624 (Plate XLIX)
Beads Nos. 636, 638.
Misc. Nos. 623, 625.

Depth 4′—Pottery No. 729.
Terracotta No. 617.
Wheel No. 728.
Token No. 716.
Beads Nos. 652, 653, 655.

Depth 5′—Pottery No. 749.
Bead No. 734.
Misc. Nos. 663, 678.

Depth 6′—Pottery No. 783.
Misc. Nos. 740, 756.

Depth 7′—Pottery Nos. 777, 824.
Seal No. 800 (Plate L).
Bead No. 772.
Misc. Nos. 799, 802, 807.

Square No. V 19.—The depression observable in the north-east quarter of the fortress at Basarh was opened out especially by squares V 19 and U 21, where the closeness of water to the surface made deep excavation impracticable. The greatest depth reached in V19 was 6′ on the north, where the ground rose, and 4′ on the south, where it sloped to the hollow. No walls were met with, but three very narrow, circular wells, some three feet in diameter, lined with curving tiles whose edges were advanced at top and bottom so as to give them a purchase on the earth behind them. The finds were not particularly numerous, but they were significant for the depth attained, as they include three terracottas which Sir John Marshall assigns to either the Śungan or the Mauryan period. They are numbered 532 (Plate XLIII), 569 and 550 (Plate XLIV) respectively, and all were found between one and three feet of the surface. That this is due either to the removal of the upper strata in the excavation of some tank at this spot, or, if the actual tank lay, as seems probable, a little farther south, to the deposit here of some of the earth thrown out by such excavation, has already been noted above in connexion with the Mauryan seal No. 800 from the adjoining pit W 17. Fragments 532 (Plate XLIII, *b*) and 569 are both broken statuettes showing the legs and trunks of standing figures wearing the elaborate girdles of early times, and with

the inserted floral ornaments of the period in the background where space is left by the drapery. Fragment 550 is of even greater interest (Plate XLIV). It represents in the form of a terracotta plaque a standing figure, with hands on hips. The costume is scanty, but of the usual archaic type. The figure wears huge round earrings, and is further distinguished by wings of a very unusual type, while the background is everywhere filled with floral ornaments. Sir John Marshall notes that the plaque is probably Mauryan, but might perhaps be Śungan. The wings are very remarkable, and suggest Mesopotamian influence in their schematic treatment. This lends to the find a very special and unusual interest. In the Indian Antiquary for 1908, Dr. Satischandra Vidyabhushana, the distinguished Principal of the Sanskrit College in Calcutta, published a short paper on "The Persian Affinities of the Licchavis," in which he sought to show that originally the Licchavis were immigrants from Persia. Is not this figurine direct support of Dr. Vidyabhushana's theory? Mesopotamian elements in India are recognised to have come hither through the channel of Persepolis (cf. Mr. Kennedy's article on "The Early Commerce of Babylon with India" in the JRAS for April 1898, page 241), so that the figurine is thus potentially a Persian document in any case. Its importance as such will be recognized. It is not the sort of thing that travels; it was in all probability manufactured on the spot. That would seem to involve direct Persian influence in Mauryan times at what is now Basarh. We shall see later, when we come to consider seal No. 607 from square No. S 25, that such influence at this site was long continued, also (cf. *infra*, p. 79).

The finds as a whole from V 19 may be tabulated as follows :—

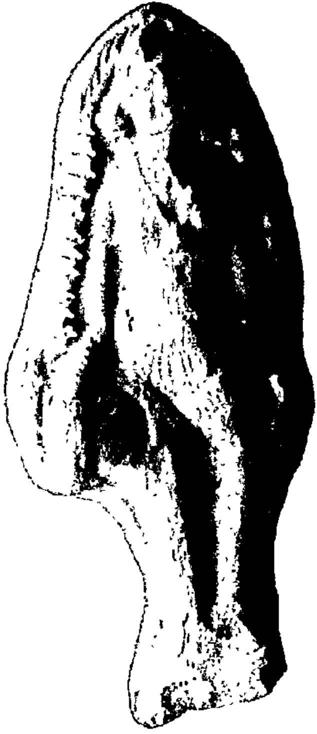
Depth 1'—Pottery Nos. 521, 523.
Terracotta No. 512.
Wheels Nos. 496, 515.
Coin No. 509 (obliterated).
Bead No. 498.
Misc. No. 504.

Depth 2'—Terracottas Nos. 532, 550, 554.
Wheel No. 541.
Brick No. 538.
Bead No. 545.
Misc. Nos. 544, 561.

Depth 3'—Pottery Nos. 598, 608, 614, 615, 640, 647.
Terracottas Nos. 569, 578.
Wheel No. 621.
Beads Nos. 573, 609, 656.
Misc. Nos. 626, 637, 645.

Square No. U 21.—U 21 was of all our pits the one most certainly falling within the limits of a tank, if any tank ever existed in this general area. It did, however, yield a few terracotta fragments of at least Gupta date, but as in the case of V 19, it yielded, more significantly, three fragments of certainly Śungan, possibly Mauryan date, in Sir John Marshall's judgment. The only complete specimen is a plaque, No. 661 which is 6" in length by $3\frac{1}{4}$" in breadth. This is of special interest as a replica of the broken specimen No. 550 with the Mesopotamian wings, which we have discussed in the

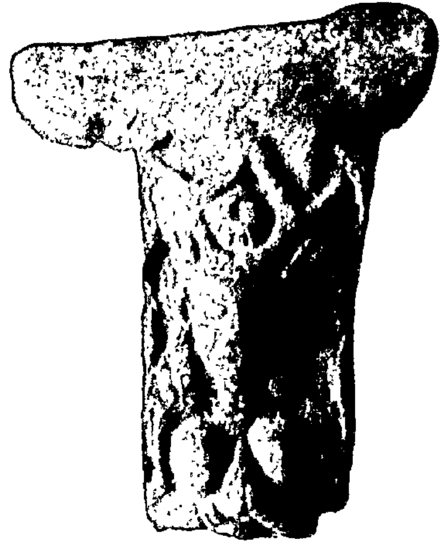
EXCAVATIONS AT BASARH.



a. (475).



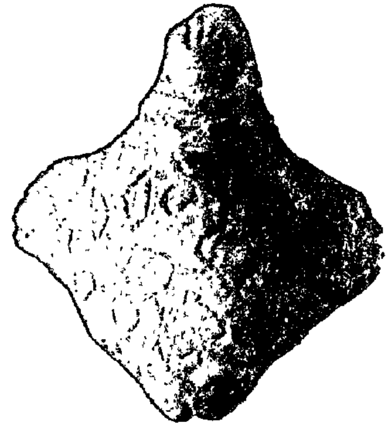
b. (702).



c. (741).



e. (700).



f. (627).



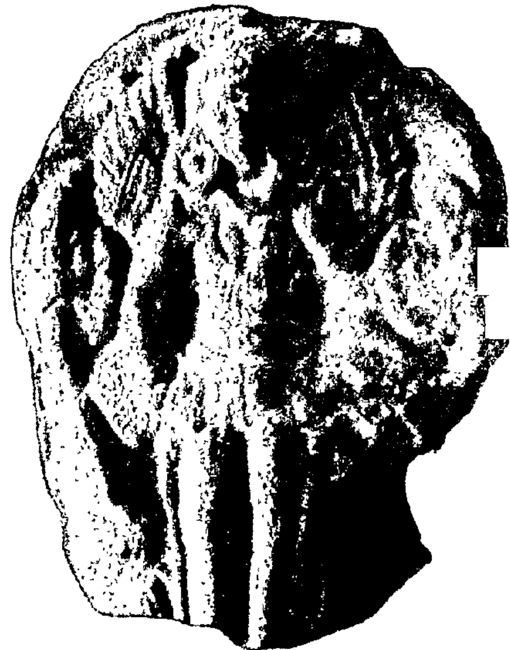
d. (552).



g. (470).



h. (423).



i. (550).

preceding paragraph. No. 546 is the headless and footless trunk of a figure like Nos. 532 and 569 from V 19, (it measures 3″ by 2½″), while No. 700 is by far the most beautiful terracotta recovered this year (Plate XLIV*e*). This is the lower half only of a tall, narrow plaque, widening at the base to a sort of lotus pedestal on which stands a very tall, slender figure, whose proper right hand rests naturally and gracefully on the side. The left is caught lightly in the girdle across the hips. This girdle, with its ruff-like appearance, and its very gorgeous dependent tassel, reaching nearly to the left knee, is characteristic of very early art in India. The body itself seems to wear a tightfitting bodice over the very slender waist and to be decorated with vertical pleats above the waist-line. The sleeves are ruffed at the wrists, and the feet are adorned with broad, prominent anklets, which look like the anklets of little bells one sometimes sees to-day. The texture and colour of this fragment are alike excellent, and the extreme grace of the pose is quite exceptional. The hands are exquisitely modelled, the fingers being long, slender and most naturally disposed. The drapery is richly arranged in graceful folds, and it is not too much to say that the whole is a very remarkable example of the art of the second century B.C., if not of a period still older. It is greatly to be deplored that we could not discover the missing upper half of the plaque, for, with the possible exception of a few specimens from Bhīṭā, it is doubtful if any equally fine example of pre-Christian terracotta is known in India. The other finds call for no detailed mention, and may be tabulated as follows :—

Depth 1′—Pottery Nos. 502, 514, 517, 520.
Terracottas Nos. 495, 500, 501, 513, 516.
Misc. Nos. 505, 519, 524.

Depth 2′—Pottery No. 540.
Wheel No. 531.
Misc. No. 548.

Depth 3′—Pottery No. 587.
Terracottas Nos. 546, 661.
Wheel No. 639.
Beads Nos. 537, 611.
Misc. No. 613.

Depth 4′—Terracotta No. 700.

Square No. T 23.—Square No. T 23 was the most disappointing of all our excavations. It disclosed only one brick platform, 3′ 8″ deep, on the eastern side; an uncertain wall covering a brief stretch north of this, and seven circular brick wells arranged in two lines or rows running north and south in the western portion of the pit, with a concrete pavement in the south-west corner, buried 6′ 3″ deep. The finds number only two altogether, a very small metal bangle found six inches below the surface, No. 493, and a single, barrel-shaped carnelian bead, No. 795, which occurred at a depth of 5′ 6″.

Square No. S 25.—Here a remarkably different yield rewarded us; 2 pieces of pottery, 6 terracottas, 7 seals, 2 seal matrices, 1 coin, 1 brick, 5 beads, and 2 miscellaneous articles were recovered, together with such a maze of walls that the plan of the pit must be published with this paper (Plate XLII, *d*). These walls occupied so much of the square area, moreover, that here alone of all our new trial pits in the north-east portion of the

citadel were we able to attain any reasonable depth in the time at our disposal, but the greatest general depth even here was only fifteen feet. It is, however, particularly noteworthy, that of all these various finds, only two occurred below the level of eight feet. The finds nearest the surface were not in apparent connexion with any of the walls. In the north-east corner of the pit, where the top of the wall J-K-L is 2′ deep, a fragment of carved brick (No. 510), and a broken bit of blue and white glazed pottery (No. 528), were found, 1′ below the surface. In the north-west corner a crystal bead, (No. 492) occurred at a depth of nine inches only, which was barrel-shaped, and showed six longitudinal facets. Just north-west of the centre the head and shoulders of a terracotta figurine (No. 499) was met, nine inches deep, which shows the wig mentioned in connexion with several figurines described above, while south of the centre of the western edge, only three inches deep a clay domino appeared. None of these surface finds appear connected with the underlying walls. Along the north edge of the pit, just east of the middle point, a barrel-shaped bead (No. 536) banded with opaque white and translucent pink, and cut in facets, was found 1′ 10″ below the surface, and a damaged terracotta head (No. 539) three inches deeper ; but no walls occur in this area. At a depth of 2′ 7″ just south-east of the centre of the pit was recovered a very interesting terracotta fragment (No. 552) (Plate XLIV, *d*) of uncertain date, representing a shaggy bear standing on a hemispherical pedestal. Some riding figure appears to have been broken off from the bear's back. Due south of the same point above the top of the wall D-E, a large clay bead appeared, No. 602, at a depth of 3′, and on the same level, a little to the east, above the brick platform in the south-east corner of the pit, a round seal-like token made of clay (No. 588) with undecipherable traces of an inscription. There appear to have been six aksharas, of which the first is *ki* and the fifth and sixth possibly *kasya* or *trasya ;* a clearly defined svastika is traceable below. It is probably assignable to the Gupta period. In the extreme north-east corner, at a depth of 3′ a clay signet or seal-matrix was found (No. 574) (Plate XLIX). The matrix itself is four-sided, tapering above, where it is pierced for carrying on a string, and has a flat, rectangular face which is the actual seal. This face is divided midway by two closely parallel horizontal lines, above which are three symbols, a triśula in the centre and two uncertain objects to right and left. That on the proper right resembles in shape the early Brahmi character for *dhu*, while the one on the left looks like *ra*. It is, however, doubtful if they have phonetic value. The legend is incised in four aksharas below the dividing lines in the centre of the seal. They are negative on the matrix itself, as they should be, but in the impression are legible as *Banjulaka*, possibly for Vanjulaka. The genitive ending may perhaps have existed originally, but the edge of the matrix is worn with use, and only a faint trace of a fifth letter remains. The aksharas are referable, in my opinion, to the early Gupta period, fourth century A.D. The findspot closely associates this matrix with the structure lettered J-K-L on the plan. On the eastern edge of the pit, just south of a line drawn through the centre, was found, at a depth of 3′ 7″, the very fine temple *seal*, No. 607 (Plate XLIX). The area is circular, with a diameter of $1\frac{3}{8}''$. Two closely parallel horizontal lines divide the field into two unequal parts, the larger half being above the line, and occupied by the device, which is a very perfect example of the Persian fire-altar motif.

EXCAVATIONS AT BASARH.



a, (518).



b. (317)



c, (252).



d. (123)



e. (643)



f. (390)



g. (469)



h. (151).

The interest of this seal is very great. We have already seen above, what direct confirmation of Dr. Vidyabhushana's Persian theory of the Licchavis is afforded by the terracottas with Mesopotamian wings. Is not this seal an equally eloquent witness for the same influence at a later period? That the device is really a specifically Persian fire-altar admits of no dispute, as all authorities have equally recognized it to be such. Professor Rapson writing in the journal of the Royal Asiatic Society for January 1901, published a seal as No. 13 of the plate which faces page 98 which shows the same device in developed, conventional form and not only recognized it to be a Persian fire-altar, but in his descriptive text on page 107, discussed the time and place of the introduction into India of this motif. He pointed out that a fire-altar of somewhat similar form without those attendant figures which are characteristic of the purely Sassanian coinage, appears on the Scytho-Sassanian coins, the dates of which are fixed and which must all be included between 300 and 450 A.D. He goes on to say that during this period, intimate relations existed between the Sassanian monarchy and the Kushaṇa kings of Kabul, and speaks of a compromise noticeable between the Sassanian and the Kushaṇa systems of coinage in certain outlying portions of the Sassanian dominions. He concludes that "we can scarcely be wrong in recognizing the influence of this coinage in these seals which bear a representation of the fire-altar, accompanied by an Indian inscription. The former denotes their origin, and the latter marks them as distinctively Indian." This is most interesting and valuable, and I agree heartily when Professor Rapson remarks that the fire-altar is significant of origin. It is, to my mind, unmistakable evidence of direct Persian influence. We may also, in the case of this particular seal, agree with Professor Rapson as regards the question of date; he assigns his seal, for the reasons given to either the fourth or the first half of the fifth century A.D., and our own seal must be assigned to the same period on the epigraphic evidence of its inscription. And we may even agree whole-heartedly that the seal is absolutely Indian. When, however, Professor Rapson goes on to explain the peculiarity of form in such fire-altars as being due to a modified Sassanian coinage, and when he would adduce a territorial location for such seals from the considerations which he enumerates, and assign them to the northern districts of the Kushaṇa kingdom of Kabul, I do not see how we can follow him. Is not our present seal clear evidence that no such territorial limits can be placed to the fire-altar *motif* in India? If our seal were isolated we might not, perhaps, be warranted in laying too much stress on its occurrence at Vaiśālī, for it is in the very nature of seals to travel, and a single specimen, even at Vaiśālī, might conceivably have come there from so remote a place as the Oxus territories or Badakshān. But our seal is not so isolated. Sir John Marshall found four specimens of strikingly similar type with this same motif in his excavations at Bhīṭā, (cf. A. S. R. 1911-1912, Plate XXI, Nos. 98, 99, 100, 101) and Dr. Bloch also found four in his excavations at Basarh (cf. A. S. R. 1903-1904, page 113, No. 63, page 116, No. 89, page 119, No. 129 and Plate XL No. 9). All these would seem to my mind to indicate not merely Persian influence, but Persian influence wholly independent of any dynasty in Kabul, and, if the expression may be permitted. Persian influence domiciled and thoroughly at home in Eastern India. The legends on the sealings are important confirmation of this view and show how thoroughly Indian these sealings are in character despite the Iranian influence which they betray.

The seal in our present collection reads *Bhagavata Adityasya* and must be the seal of some temple, presumably in Eastern India, to the divinity *of the Blessed Sun* as worshipped in the cultus of the Persians domiciled in India. Otherwise, if it had been merely a Hindu temple to this luminary, this form of altar would not have occurred. It is interesting to note that one of Sir John Marshall's seals (No. 98) also reads *Adityasya*, (seal) *of the Sun* where the same observation holds good, while the seal with the Persian fire-altar which Dr. Bloch illustrates as No. 9 of his Plate XL has the equally significant personal inscription, *Ravidāsa(ḥ)*, *the Slave of the Sun.* These legends confirm the Persian character of the device and point to a pronouncedly Persian cult of the Sun in Eastern India in Gupta times. They are thus in harmony with what Sir Ramkrishna Bhandarkar wrote in his book "Vaiṣṇavism, Śaivism, etc.," p. 153 ff. But, as I have endeavoured to show elsewhere, the antiquity of this cult in the Patna and Gayā Districts especially is greater than has generally been recognized and far exceeds the period of the Guptas. Indeed, by this time the descendants of these originally foreign elements were indistinguishably amalgamated with the Hindu population, and were just as much Indians as anybody in the country; as the testimony of Varāhamihira makes clear. The stream of influence, as I understand the evidences, is not only wholly independent of the Kushaṇas and the Sassanians, but is something like a millennium older than the contact of these dynasties to which allusion has been made above. The seals we are discussing are thus to be connected, historically, not with the Kushaṇa dynasty of Kabul in the fourth century A.D., but rather with the pre-Christian winged terracotta figurines we have examined above. These figurines are in point of date, intermediate between the Gupta seals and the older evidences of this same influence in this region. I would add that if General Cunningham is right in his interpretation of that symbolism which occurs on seal 651 from square A′ 9 (discussed on page 66 above), and this does really come from Multan, the implied connection between these two sites might suggest that it was not impossible that the temple of the Sun to which our seal refers was the famous Magian temple to Sūrya at that place, the foundation of which in Epic times is described in the Purāṇas. But it is more probable to my mind that the sealing comes from some temple in the adjoining District of Gayā, where there are abundant evidencies of the sun-cult at an early period and a large community of Magian descent still surviving as Śākadwīpin Brahmans (cf. the chapter on this district in Martin's "Eastern India"). But in any case, the important point to notice is that we do not have to go to any portion of the Sassanian dominions to explain this motif on Indian seals. This particular form of the fire-altar in Indian Archæology, without attendant figures, is not due to any modification of Sassanian coinage through Kushaṇa influence, but rather to the survival, in India itself, of the older, more original Persian tradition in such matters, which antedates the Sassanians themselves by many centuries. So far as I am aware, the oldest monuments in Persia regularly show the fire-altar as here, without attendants. The attendants were apparently an innovation of Sassanian times. In their absence on Indian seals, therefore, it seems to me that we have evidence for the continuity in India of the older form, rather than for post-Sassanian influence, which is a matter of very considerable importance for the early history of India.

A little below the south wall of the building J-K-L, in the north-east corner of the pit, at a depth of 5′; a very cleverly executed clay tortoise (No. 627) was found, 2½″ long by 2″ wide (Plate XLIV*f*). The date of this object is uncertain, but its depth would seem to indicate the Gupta period. The stratum between 5 and 6 feet deep yielded most numerously of all. From it came 3 earthen cups (No. 755), found near the wall T-U; terracotta No. 702, found near the wall Z-A′; three seals, one matrix, one coin and one circular clay mould. Of these, the little terracotta head No. 702 is of special interest (Plate XLIV). Its modelling is of exceptional excellence and beauty, and according to Sir John Marshall its date is probably Mauryan. He compares it with the male head wearing a helmet which was published by him among the finds at Sārnāth as fig. 8 on page 55 of the A. S. R. for 1907-1908. Of the latter he writes: "The modelling is rough, but thoroughly artistic, and the western classical influence in the treatment of the features is very strikingly apparent. Indeed, there is nothing whatever Indian about it. On the head is a peaked conical hat or helmet. with apparently a cap of some sort worn beneath it, from which side lappets descend, covering the ears and almost meeting under the chin. For the origin of this headdress we must look towards Persia (cf. O. M. Dalton, *The Treasure of the Oxus*, pages 47-54) and it may well be that the terracotta itself or the artist who executed it, came from that country." In view of the unexpected developments in my work at Pāṭaliputra, it strikes me that this pronouncement was truly remarkable. It shows us that here again we have Persian influence at Vaiśālī, and not only here, but presumably also in all those figurines we have seen above which show this peculiar conical or peaked cap. The present Basarh specimen is slightly damaged as regards the right side of the headdress, but this is fairly well preserved on the left side, where its archaic character is apparent. The delicately modelled face is in excellent condition. Its occurrence at a depth of 5′ 10″, close to the wall Z-A′, can only be accidental as no connexion between it and any of the higher walls in this square is possible. The matrix mentioned above, No. 703, was found in the same place and at the same depth, but its precise date is indeterminable. It is of dark gray stone, square in section, and its sides are decorated. The device is a large *kalaśa* with foliage, but unfortunately it bears no lettering by which its age might be judged. The *three seals* found at this level also occurred, curiously enough, in the same little area at depths varying from 5′ 4″ to 6′. Whether No. 672 (cf. Plate L) can properly be called a seal, is doubtful. It is an irregular fragment only, of some large piece of clay measuring in its present condition 2¼″ by 1½″, and no formal area is discernable. A very roughly sketched bullock running to right serves as device and there is a crescent moon above. Of the original legend only four aksharas are now preserved. The second of these is perhaps doubtful, but with this reservation the whole appears to read *Māradatta*. If this is correct, it is indeed a curious name. But is it any more curious than those other names, *Mārasiṁha* and *Mārapa* recorded by the Sanskrit dictionary? *Mārapa*, 'Death-Drinking,' is as extraordinary a name as could well be imagined. *Māradatta*, if such our legend really is, is hardly more than 'Child of Love'; but I admit that even this seems most improbable to me. The other two seals (Nos. 706 and 713) are duplicates, the latter being so worn as to be barely recognizable. No. 706 (Plate L) is in much better condition. The area is oval measuring ¾″ by ⅝″ with a lion seated to

right as its device. The legend contains five aksharas, of which all but the fourth are certain. I read it as *Nāgadakkasya,* (the seal) *of Nāgadakka.* The double *k* is doubtful. It may have been a *ksha* instead. But to my eye there seems no possibility of the *tta* we should have expected. The coin recovered in this pit was found 5′ 6″ deep, a little to the east of the centre along the northern edge, and is numbered 701. It is a clearly legible coin of Kadphises II, shown in Vincent Smith's *Catalogue of the Coins in the Indian Museum* as Fig. 7 of Plate XI. Coins of Kadphises II have certainly been found as far east as Benares, but I am under the impression that no coin apart from the present specimen, is known from a site so far east as Vaiśālī. The point, however, is of no particular importance, as the difference between Benares and Vaiśālī is inconsiderable, and the Honourable Mr. Burn whom I have consulted, tells me he seems to remember having heard of specimens recovered even at Patna. Failing definite data about the latter, however, the Basarh coin may perhaps be recorded as, for the time being, marking the most easterly point in the distribution of this prince's coinage.[1] The mould recovered 6′ deep (No. 714) again near the wall Z-A′, has a concave circular area, showing five conventional petals arranged in a circle around a calyx with stamens, all being prominently raised on the mould itself, so that the impression show as a five-petalled flower in intaglio. The whole is encircled by a double row of deeply indented dots, which give the design a neat and harmonious border in high relief.

But although the excavation was continued for a further nine feet over much of the area covered by the pit, the finds below 6′ were only four in number. A broken terracotta statuette of very rough workmanship, (No. 758) was found at a depth of 6′ 3″, still in the region of the wall Z-A′, and an illegible *seal* (No. 775) in the same spot, 7′ 6″ below the surface. The same restricted portion of the area yielded at a depth of 11′ 4″ a round, opaque, pink bead, No. 815, with one narrow translucent band running through the centre. But the only find of interest from a low level in S 25 was *seal* No. 808 (Plate L). This lay 11′ deep, in the north-west quarter of the square, near the point of wall lettered D′, but no wall occurred at any such depth in this locality. The lump of clay is triangular in section and its two sloping faces each bear a separate impression. One of these shows an incomplete area, known from other specimens to be circular, $\frac{3}{4}$″ in diameter, with a stūpa in the centre from which three branches extend at the top. To the right and left are two small round bosses, and underneath is a platform, drawn in outline and apparently in perspective. The legend contains six aksharas and is readable with certainty as *Śreshṭhinigamasya,* (seal) *of the Guild of Bankers.* In all, sixteen specimens of this seal were recovered in the year's work, a very unusual number for any one type in this collection. Banking was evidently as prominent in Vaiśālī as we should have expected it to be, judging from the notice in Manu to the effect that the people in Magadha were bards and *traders* The other face of No. 808 is unfortunately worn, and the legend, if there ever was one, is now obliterated. But the device is recognizable as a small bull in the right field recumbent to left, facing a Nandipada symbol. The latter is so faint as to be hardly perceptible; but the right shadow brings it out.

[1] Since writing the above, I have found large numbers of Kushan coins, both *copper and gold (2 specimens), at* Pāṭaliputra.

The tabulation of finds for S 25 is as follows :—

Depth 1'—Pottery No. 528.
Terracotta No. 499.
Brick No. 510.
Bead No. 492.
Misc. No. 487.

Depth 2'—Terracotta No. 529.
Bead No. 530.

Depth 3'—Terracotta No. 552.
Seals Nos. 574 and 588 (both Plate XLIX).
Bead No. 602.

Depth 4'—*Seal* No. 607 (Plate XLIX).

Depth 5'—Terracotta No. 627.
Bead No. 628.

Depth 6'—Pottery No. 755.
Terracotta No. 702.
Seals Nos. 672, 703, 706 (Plate L), 713.
Coin No. 701.
Misc. No. 714.

Depth 7'—Terracotta No. 758.

Depth 8'—*Seal* No. 776.

Depth 11'—*Seal* No. 808 (Plate L).

Depth 12'—Bead No. 815.

D. B. Spooner.

P.S.—To this report is appended a detailed List of the Seals recovered in these excavations, followed by the unclassified Field-Register of all finds, showing the precise spot at which each article was found.

LIST OF SEALS.

(Found at Basarh in 1912.)

N. B.—The numbers are those of the Unclassified Register of Finds.

No. 7. A more or less flat piece of clay, without string-marks on the reverse; therefore a *token* rather than a sealing. The seal impression shows an oval area now indeterminate, owing to the fact that the bottom and left-hand edges are both damaged. The approximate dimensions are $\frac{7}{8}''$ by $\frac{5}{8}''$. There does not appear to have been any emblem or device. The legend is obliterated all except one vowel point and two aksharas on the right. These may be read tentatively as *ikasya, i.e.*, '(the seal) of (somebody whose name ended in) *ika*.' Date, presumably Gupta period. The token was found at D′ 42 b 4, eight feet deep. There are no duplicates, and the present specimen is in poor condition.

No. 8. A long, narrow lump of clay, reddish in colour, and triangular in section on short axis, showing the impressions of two signets one on each of the long sloping sides. Both are very faint, but are determinable from duplicate specimens:

No. 8 A. (*cf.* No. 65 on Plate XLVI). Oval area, $1'' \times \frac{1}{2}''$; device, large lion, seated on flat pedestal, facing; below, legend in Gupta characters, *Vishṇudāsa, i.e.* '(the seal) of Vishṇudāsa.' In all, thirteen impressions of this signet were found, making it one of the commonest types in this collection, although, curiously enough, it does not seem to have occurred at all in the Bloch Collection of 1904. It sometimes occurs alone, and sometimes, as here, in conjunction with the type described under 8 B, which suggests that Vishṇudāsa was a banker.

No. 8 B. (*cf.* No. 808 on Plate L). On the present specimen the area is undefined and its surface badly worn. The duplicates show that the area is properly round, with a diameter of $\frac{3}{4}''$. The device here is almost obliterated; elsewhere it appears as a hemispherical stūpa from the top of which project three branches, which makes the whole readily mistakable as an urn or *kalaśa* when the impression is not clear. The stūpa rests on a platform which is drawn with an apparent attempt at perspective, and above which, to right and left of the stūpa, are two small, round bosses, whose meaning is unknown. The legend, which is entirely missing on the present example, occurs below this platform, and is readable on duplicate No. 808 as *Śreshṭhi-nigamasya i.e.*, '(seal) of the Guild of Bankers.' In all, sixteen impressions of this seal were found, at greatly varying depths, from 6′ 3″ (No. 404) to 15′ 8″ (No. 286), and one example (No. 36) was found on the surface, where it had evidently been lost during the previous excavations. It is noticeable that this seal is never impressed alone; some personal seal-impression always accompanies it. In this case, the individual adding his own signet to that of the Bankers' Guild is Vishṇudāsa, as we have seen. Others who so add their private seals are Vyāghravala (on No. 282), Bhadradāsa (No. 286), and Kaṅka (No. 612). Of the various specimens, No. 286 is in good condition, but No. 808 is incomparably the best. Without it, no detailed description would be possible. Seal No. 648 appears at first sight to show the impression of 8B alone, but this is due to the fact that the companion impression has been largely broken off. From what remains, it appears to have been the seal of Vishṇudāsa.

The present sealing with its two impressions was found at D′ 42 b 4, eight feet deep.

The duplicates of 8 A are numbered 36, 53, 65, 279, 298, 404, 631, 633, 634, 635, 648 and 804. The most frequent depth is 10′ 3″.

The duplicates of 8 B are numbered 36, 53, 282, 286, 404, 612, 629, 631, 632, 633, 634, 635, 648, 778, 808. The prevailing depth is between ten and eleven feet; the maximum is 15′ 8″.

The Bloch Collection does not appear to contain either.

No. 9. (Plate XLVI). A flat, nearly circular piece of clay, with the marks of a broad, flat, fibrous cord on the reverse. The obverse shows the impression of a round seal, about $\frac{3}{8}$″ in diameter. The present specimen is damaged on the right side, and there is a cut out of the lower edge. The device is a humped bull reclining to left. The legend occurs below, and on this specimen is so faint as to be almost illegible. Fortunately No. 398 is a duplicate, and the two together may be read with tolerable certainty as *Yajnasomasya*, *i.e.*, '(the seal) of Yajnasoma.' The present specimen was found on the surface of the ground at the beginning of our excavations. The duplicate, No. 398, was found 8′ 6″ deep.

No. 10. (Plate XLVI). No. 10 is another sealing found on the surface. The cord marks on the reverse follow the short axis. The seal impression on the obverse shows a deep, pointed oval area, $\frac{3}{4}$″ × $\frac{1}{4}$″. The device, which is nearly in the centre of the field, is obscure. It might be either a bull or a lion, recumbent to left, more probably in my judgment, the latter. Above is a small crescent moon. Whether there was originally a legend below, I cannot be quite sure. All that is now visible is one figure, which may be read as *ghe* if it is really an akshara with phonetic value, or which may be a trident. The latter assumption would seem improbable from the position of the figure, but on the other hand it is so disproportionately large that it leaves no visible room for other aksharas. No duplicates exist in either of the Basarh Collections.

No. 14. (*cf.* No. 271, Plate XLVII). An oblong piece of clay, with concave reverse; cord marks along shorter axis, which means that the sealing was affixed to a long narrow roll bound with a flat cord, the length of the sealing coinciding with the long axis of the roll. The seal impression shows an oval area measuring $\frac{3}{4}$″ × $\frac{2}{3}$″. The device is a "fantail peacock," facing, which is the emblem characteristic of the eastern mintage of Gupta coinage. I may add that it is also supposed to have been the emblem of the Mauryan dynasty, and that among the Buddhists of Burma (who doubtless preserve an old tradition) this emblem represents the Sun. The present sealing, however, is apparently not that of any royal personage, despite the use of the Imperial Gupta cognizance. The legend reads *Vyāghravalasya*, *i.e.*, '(the seal) of Vyāghrabala,' who is shown to have been a banker by seal No. 282 in this collection, where his signet occurs in conjunction with the seal of the Guild of Bankers. The legend is not clear on this specimen, but there are four duplicates, Nos. 167, 198, 271, and 282. The present example was found at D′ 42 d, only 2′ 6″ below the surface, but three of the five occurred 14′ deep or over, No. 282 having been 15′ 6″ below the grass. No. 198 is in very good condition, and the impression on No. 167 is also fair, but the left side of the sealing is damaged. Apart from No. 282, the seal of Vyāghrabala always occurs alone.

No. 36. A sealing with two impressions, duplicates of 8 A and 8 B, found on the surface. Neither impression is in good condition.

No. 53. A sealing like No. 36, with two impressions duplicating 8 A and 8 B, found at B′ 43 c 4, eleven feet deep.

No. 54. (Plate XLVI). A unique example of a very handsome seal without legend. The area is an oval, 1″×½″, with the finely executed figure of a boar recumbent to left as its device. In artistic excellence the seal is unusual, and it is the more regrettable that no duplicates were found. The present specimen occurred at a depth of eleven feet in square B′ 43 c 4.

No. 55. (*cf.* Plate L, No. 718). A broken example of the commonest of our seals. The area is rectangular, measuring 1″×½″, with a narrow, ribbon-like border ornament all around the edge. The device is a small lion, seated on a flat pedestal, facing, which occupies three quarters of the entire field. Below occurs the legend, in small and delicate lettering, which is exceedingly faint on several specimens, but legible on others as *Nāgaśarmmasya, i.e.*, '(seal) of Nāgaśarmma,' instead of the more grammatical *Nāgaśarmmaṇah*. Such traces of illiteracy are not infrequent on Indian seals, though it is not altogether easy to understand why. It would seem at least indicative of the artificiality of the use of Sanskrit. The present seal was found at B′ 42 c 3, seven feet three inches below the surface. The 16 duplicates are numbered 68, 71, 72, 75, 82, 85, 116, 192, 197, 201, 281, 359, 477, 534, 669, and 718. No. 534 was only 4′ 6″ deep, but five specimens were 14′ or more below the surface. The seal is always used alone, so far as our 17 examples show. The legend is perhaps best on No. 359, but the right side of the sealing is missing. As a whole, the seal is a neat one, without being specially remarkable. It is, however, worthy of better grammar than it shows.

No. 61. (Plate XLVI). A high-backed pinch of clay with very deeply concave reverse. Only one of the sloping faces shows a seal impression. The other now appears as plain, but may perhaps have had an impress now obliterated. Sealings of this shape, triangular in cross section, usually show two impressions. The one traceable is an oval, 1″×½″, the lower edge of which is damaged. The device is a very schematic conch or *śankha* in outline, which would hardly be recognizable as such if it were not for the gradations observable in this *motif* even in the present collection. The legend is in bold letters of early type below the emblem, and reads *Buddhakasya, i.e.*, '(seal) of Buddhaka.' The present example is unique, and was found at B′ 43 c 4, twelve feet three inches deep. It is a rather fine, bold seal, unusually legible.

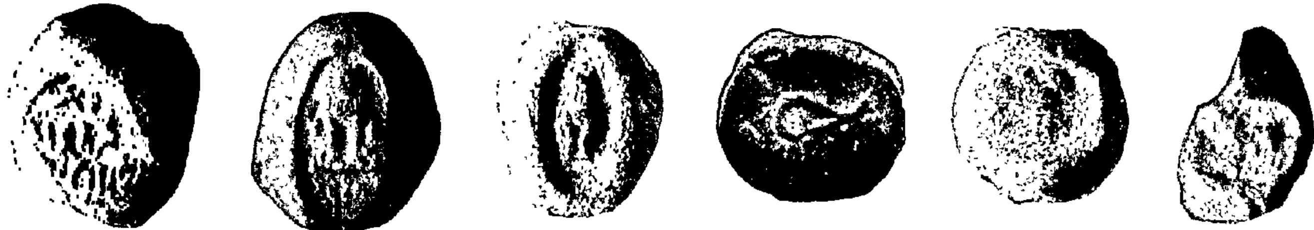
No. 62. (Plate XLVI). A medium sized, flat, oval lump of clay, with concave reverse, showing as its device a large, naturalistic conch or *śankha*, laid on its side in centre of field, on short base line as pedestal. The tip or point of the shell is to left. There is no legend, and no duplicates were found. The present specimen occurred at B′ 43 c 3, twelve feet three inches deep. I would add that the edge of the sealing has an almost bevelled appearance.

No. 63. (Plate XLVI). A small sealing of black clay, roughly oval. The impression has been pinched in on one side, but appears as an oval, ¾″×½″. The device is a rather fine humped bull, reclining to left, and filling practically the entire area. There

EXCAVATIONS AT BASARH.



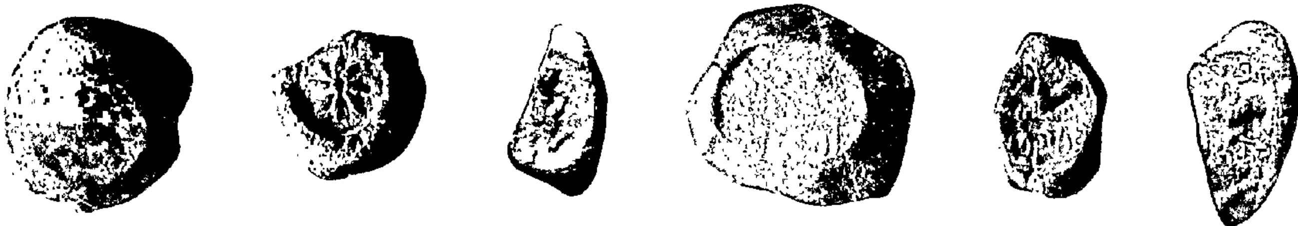
9 10 54 61 62 63



64 65 66 73 74 77



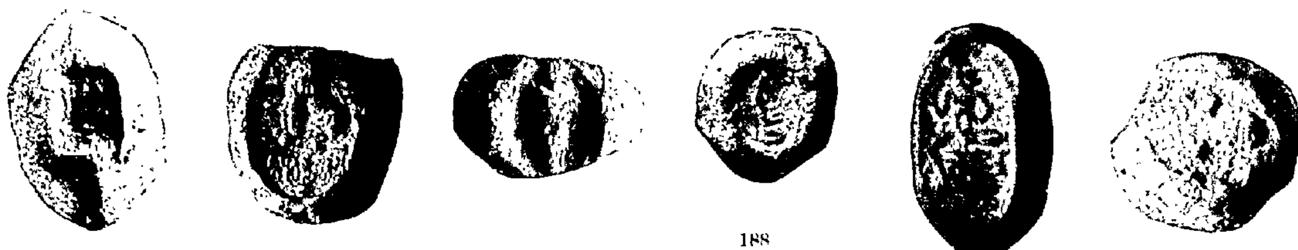
81 84 86 98 97



103 114 115 120 142 154



159 160 162 163 164 165



166 168 174 188 191 194

is no legend. The sealing was found at B′ 43 a 4, nine feet deep. There are no duplicates.

No. 64. A largish lump of clay, pinched into a ridge, with concave reverse showing cord marks; but although the ridge runs, as usual, with the long axis of the rolled document to which the sealing was affixed, the breadth of the sealing is greater than its length, which is exceptional. Two impressions occur:

64 A (Plate XLVI) shows a circular area ⅞″ in diameter. The device is a small conventional *śankha*, high in the field. The bulk of the area is occupied by the legend in fairly large characters arranged in two lines. The upper, which runs across the centre of the seal, seems to read *Makkutali*, the lower, (*ni*) *gamasya*. The latter word means 'of the Guild,' but I am unable to explain the former, and must needs doubt if the reading is correct, although there seems no uncertainty about it, except as regards the vowel *i*.

64 B is badly obliterated. The area is indeterminate, perhaps round c. ¾″ diam. The device is a small humped bull recumbent to left. Below are traces of a legend now illegible.

The sealing was found at E′ 42 d 1, three feet six inches deep. There are no duplicates of either impression, but I would note that Dr. Bloch found a seal with a curious word which he read as *Mark-katanī* doubtfully (*cf.* A. S. R. 1903-04, p. 119, No. 131). The types differ, but is the word, perhaps, the same?

No. 65. (Plate XLVI). A medium sized piece of clay, so concave underneath as to be almost a shell. It was found at E′ 42 d 1, four feet deep, and bears one impression of the seal of *Vishṇudāsa* as on No. 8A. This specimen is very good, particularly as regards the legend.

No. 66. (Plate XLVI). A medium sized sealing, reverse slightly convex, with deep cord marks. The impression on the obverse is that of a long oval seal with round ends, 1″×½″, without legend. The device is a lion, facing, seated on small, flat pedestal, and occupies the bulk of the field. The figure stands out in high relief, but the details are obscured. There are no duplicates of this type, which was found at B′ 43 c 3, twelve feet deep.

No. 67. A small sealing, black, with concave reverse. The seal impression also shows a concave surface, round, and apparently ¾″ in diameter, but the area is not very clearly defined. Whatever the device in the upper half of the field was, it is now obliterated; it may have been a tree; below it, crossing the centre horizontally, is a three barred railing, below which is the legend. Only the syllables *dattasya* are now legible. It was found at C′ 44 c 1, nine feet deep. There are no duplicates.

No. 68. A fairly clear example of the seal of *Nāgaśarmma* as described under No. 55, *q.v.* The present specimen is broken across the top. It was found at B′ 43 c 3, twelve feet six inches deep.

No. 69. A moderately large pinch of clay, triangular in cross section, with two impressions, as usual. It was found at B′ 43 c 3, twelve feet six inches deep, and there are no duplicates:

No. 69A shows the impress of a round seal, 1″ diam. The device is a tall, slender *kalaśa* or urn in the centre of the upper field. The legend is in neat aksharas across or just below the middle of the field, and can be read with certainty as

(Dha)rmmāsanādhikara-(ṇasya). I am not quite sure how to render this. It would seem to mean '(seal) of the office of the Chief Justice' or some such magistrate, but I can find no precise parallel. The seal has considerable distinction, and is unusual in the spaciousness of its design.

No. 69B shows an oval area, in length about 1″; the upper edge is broken. There is no device, and of the legend, only the letters *nigamasya* are preserved. The spacing suggests that only two aksharas could have preceded the four we see, and, if so, they were perhaps *Śreshṭhi*, making the whole the '(seal) of the Guild of Bankers.' But this is purely a guess, and the Guild of Bankers, as we have seen from No. 8 B, used a stūpa as its emblem. In any case, it is interesting to find a guild-seal impressed in association with that of a magistrate.

No. 70. (*cf.* No. 81 on Plate XLVI). A small, but high ridged pinch of clay with a concave reverse now disintegrated. One of the sloping long sides is blank; the other shows the impress of a seal with oval area $\frac{7}{8}''$ by $\frac{5}{8}''$. The device is a small but extremely neat, naturalistic conch or *śankha*, high in the field and central. Beneath it is the very well-cut legend in five aksharas, *Bhadradāsasya, i.e.*, '(the seal) of Bhadradāsa.' The present specimen was found at B′ 43 c 3, thirteen feet deep. There are four other duplicates, Nos. 81, 178, 270 and 286. The last two show us that Bhadradās was a banker, for in these cases he uses, in addition to his private signet, which we have alone in the present case, the seal also of the Guild of Bankers. It is worth noting that all five specimens were very deeply buried, the registered depths being 13′, 15′, 12′, 13′ 9″, and 15′ 8″ respectively. The seal is one of considerable dignity and distinction for a personal signet of this class.

Nos. 71 and 72. Two more of the *Nāgaśarmmasya* seals, both found B′ 43 c 3, fourteen feet deep; for description, see No. 55.

No. 73. (Plate XLVI). At the same place and at the same great depth as the preceding was found a black sealing with oval impression $1''\times\frac{1}{2}''$, which shows no legend, merely the device of a more or less conventional *śankha* in outline, centrally placed and well-proportioned to the field. Nos. 177, 288 and 710 are duplicates.

No. 74. (Plate XLVI). Thick, oval piece of clay, with concave reverse, showing no legend, merely the device of a very well modelled bull, standing to right. There are no duplicates, and the present impression is not so sharp as might be wished, but it is evident that the signet was a well cut one. The figure is very life-like, and in moderately high relief. Findspot, E′ 42 d 2, six feet deep.

No. 75. *Nāgaśarmmasya*, found B′ 43 c 3, fourteen feet six inches deep. See No. 55. The present specimen has a cut in the upper left hand corner.

No. 76. A high, but broken, lump of clay, showing in its present condition only one seal impression. There is trace of another, now lost. The area is a small circle, $\frac{1}{2}''$ diam. with hair line around the edge. The cutting on the seal itself must have been very shallow, for the impression is in very low relief and thus obscure. A crescent above to left and star above to right are clearly traceable. What the central device was is doubtful. It looks like a large bird, and may have been Garuḍa. Certainty is impossible. There is no legend. The specimen is unique, and was found at B′ 43 c 3, fourteen feet deep.

No. 77. (Plate XLVI). A broken lump of clay, with one impression oval, $\frac{3}{4}''\times\frac{1}{2}''$,

without legend. The device is a humped bull reclining (?) to left, but the whole is now faint. The specimen is unique, and was found at B′ 43 c 3, fourteen feet deep.

No. 81. (Plate XLVI). A very fine example of the *Bhadradāsasya* seal, found B′ 43 c 3, fifteen feet deep ; see No. 70.

No. 82. *Nāgaśarmmasya* ; *cf.* No. 55. The present specimen shows a large square cut in the upper left-hand corner. Findspot B′ 43 c 3, fifteen feet deep.

No. 83. A lump of sealing clay of ordinary type but with no normal seal impression. There is an irregular depressed area, roughly circular, with a sort of heart-shaped scroll, but no legend and no other form of emblem. It was found B′ 43 c 3, fifteen feet deep. There are no duplicates.

No. 84. (Plate XLVI). A flat, round piece of clay, light coloured, with one impression, area circular, $\frac{3}{4}''$ diameter. The surface is slightly concave. At the upper edge, a little to right of centre, is a conventional *śankha* in outline, small. In the middle of the field is a very good humped bull, reclining to left. Below is the legend *Rudradēvasya, i.e.*, ‘ (the seal) of Rudradeva.’ This very excellent specimen is unique. It was found at E′ 42 d 2, six feet deep.

No. 85. *Nāgaśarmmasya.* Findspot E′ 42 d 3, six feet six inches deep. Compare No. 55.

No. 86. (Plate XLVI). A fairly large lump of black clay. One impression, with circular area c. $\frac{3}{4}''$ in diam. (the upper portion is broken off). The emblem is a bold lion, half seated, half reclining to left, the head lost. The legend is along the lower edge, but horizontal, only four aksharas being faintly traceable. It is not impossible perhaps, that they read *Buddhadeva*(*sya*), *i.e.*, ‘ (the seal) of Buddhadeva,’ but the reading is most uncertain. There are no duplicates of this fine seal, which was found at E′ 42 d 2, six feet four inches deep. It is remarkable that the finger-prints of the hand which kneaded the sealing into place are still “ legible ” to the expert, after fifteen centuries.

No. 93. (Plate XLVI). An extraordinary seal. The piece of clay is a large oblong, flat on top, concave underneath, and very dark in colour. The single impression which it bears, measures $1\frac{1}{2}'' \times 1''$, and the device, which is the long way of the seal, occupies the entire area. It is an elaborate sketch, in low relief, so complex as to be difficult of description. First of all, there is a long, heavy, horn-shaped roll following the lower edge of the wide oval, and seemingly depicting the lower part of a large boat or barge. The side of this barge is represented as higher than at the bow or stern in the central portion, where two further parallel rolls are shown, one above the other, which are lighter and shorter than the main one, and remind one quaintly of passenger decks amidships. The barge evidently has its prow to left. To the right, that is to say toward the stern, is what seems to be a single long oar, crossing these three rolls (or “ decks ”) obliquely and projecting downwards into the water, aft. At the front or left-hand end of the topmost roll two parallel lines rise curving gradually forwards, toward the bow. Just back of these are three other slender standards which rise perpendicularly to a greater height than the previous pair and then at the top curl backwards toward the stern but in such fashion that the one farthest to the left of the spectator is the tallest of the three, and sweeps over the curve of the other two concentrically. Toward the stern of the barge is what seems to be

an upright standard with long dependent streamers. In the space between this and the three curling standards before mentioned, and thus in the central part of the barge, or "amidships," rises a sort of platform or staging, supported on legs. This is apparently meant to be square and is shown, as it were, in perspective. On this, fairly well raised above the barge, stands a goddess, nimbate, facing, with (proper) left hand on hip and right arm raised. She appears at first sight to be nude, but minute parallel lines crossing the lower limbs horizontally are evidently meant to represent diaphanous draperies. In the exergue above and to the left is a small, naturalistic *śankha,* and, farther still to the left, a small standing animal, to left, whether a winged lion or a humped bull is now unfortunately not certain. The treatment of the neck suggests a mane. There are no duplicates of this most peculiar and interesting seal, and there is no trace of any legend by which its origin and meaning could be learned. It was found at B′ 43 c 3, fifteen feet six inches deep, and is, so far as I know, wholly unique among Indian sealings. I should judge it to be the seal of some temple, and of a temple to some goddess of the waters. In the light of our Persian fire-altars and our winged terracottas at this site, is the cult of Anahita not perhaps suggested ?

No. 94 (*cf.* Plate XLIX, No. 604). A small lump of clay with the deeply concave impression of one seal, area oval, $\frac{3}{4}''\times\frac{1}{4}''$.. There is no device, only the legend in well-formed characters of the Kushaṇa period, reading *Hastadēvasya, i.e.,* '(the seal) of Hastadēva.' This lettering is horizontal with the long axis of the seal. The present specimen, which is in fairly good condition, was found at B′ 43 c 4, fifteen feet six inches deep. Other examples, numbered 604, 719, and 732 were found at depths of 6′ 9″, 11′ and 8′ respectively. This is curious, since in my judgment the seal is certainly older than the majority of our collection.

No. 97. (Plate XLVI). A large, flat, oval piece of clay, with concave reverse. The surface of the seal impression is quite flat, oval in shape, $1\frac{1}{4}''\times\frac{3}{4}''$. A prominent ridge or line, following the short axis, divides the field into two fairly equal parts, and serves as a base or pedestal for the device, which is a lion, seated, facing. The lion is to the left of centre. To the right, and thus beside him, is what was evidently a large wheel, the details of which are now obliterated. Underneath the dividing line is the legend, *Saṁghadatta, i.e.,* '(the seal) of Saṁghadatta.' The *anusvāra* is not traceable, and there are no signs of any case ending after **datta.* The sealing is unique in this collection, and the arrangement of the design is somewhat unusual; but parallels have been found. The findspot was B′ 43 c 3, fifteen feet six inches deep.

No. 103. (Plate XLVI). A roughly circular lump of black clay, with concave reverse, and the impression of one seal. The area is round, and deeply concave; diameter, $\frac{3}{4}''$. There is no legend, only the device, a large, crane-like bird, standing, to left. There are no duplicates of this sealing, which was found at E′ 42 d 2, six feet six inches deep.

No. 114. (Plate XLVI). A small, broken lump of clay, flat both sides, bearing the impression of one simple seal, round, $\frac{1}{2}''$ diameter. There is no legend. The device is an eight-pointed star in fairly high relief. No duplicates. Found B′ 43 d 2, nine feet six inches deep.

No. 115. (Plate XLVI). A small, broken lump of clay, light red in colour, reverse missing. The obverse shows the concave impress of a small oval seal, $\frac{3}{4}''\times\frac{1}{2}''$, of which

a large part of the left hand side is gone. There is no legend. The device is a male figure without nimbus, running forward. The right arm, now missing, was apparently raised. The left hand rests on the hip. The right foot is firmly planted forwards, the left leg is bent backwards from the knee. The face seems slightly turned toward the left shoulder. No drapery is traceable. The condition of this single specimen is such that no details are discernable, but the only figure of this type known to me in India is that of Vāyu on Kushaṇa coins. The sealing was found at E′ 42 d 3, seven feet three inches deep.

No. 116. *Nāgaśarmmasya*; *cf*. No. 55. An unbroken example, with almost imperceptible legend, found B′ 42 c 1, six feet nine inches deep.

No. 120. (Plate XLVI). A medium sized lump of light coloured clay, with very concave reverse. The surface of the seal impression is flat, oval, 1″×¾″, and very badly worn. The device is a humped bull reclining to left. The legend occurs below in large aksharas now very faint; they read *Muṇḍasya, i.e.*, '(the seal) of Muṇḍa.' There are no duplicates. Findspot B′ 43 c 3, fifteen feet six inches deep.

No. 142. (Plate XLVI). A small, flat, oval piece of black clay, with the slightly concave impression of one seal. Area oval, ¾″×½″. The device is a small and rather emaciated bull, recumbent to left, centrally placed in the upper half of the field. The legend appears to have been in two lines, one above and one below this bull. The upper is wholly illegible; the lower is partly legible as ... *tramitrasya, i.e.*, '(the seal) of (somebody whose name ended in the syllables) ... tramitra). There are no certain duplicates, but a resemblance exists between this seal and the one described under 159B, the next seal in the list. Findspot B′ 44 d 2, eight feet deep.

No. 159. A pinch of reddish clay with flat reverse. There are the impressions of two seals:

159 A. (Plate XLVI). Area oval, ¾″×½″. There is no legend, the whole field being occupied by the device, which is an unusually clear and perfect representation of a stūpa, hemispherical in form, resting on a platform, surrounded by a three barred railing, and with very long wavy streamers sweeping down to right and left from the square, box-like receptacle or railing on the top. It is unfortunate that there are no duplicates of this interesting and valuable seal.

159 B. The area of the second impression is largely indeterminate. It was probably an oval, ¾″×½″ or thereabouts; but the impress on the present specimen is incomplete and there are no duplicates. The device is a humped bull, recumbent, to left, fairly centrally disposed. There was evidently a legend, partly above and partly below this figure. Faint traces of the upper line exist, the lower is completely obliterated. Neither is at all legible. The general resemblance in type between this seal and No. 142 has been noted in connexion with the latter.

Findspot, B′ 44 a 1, eleven feet deep.

No. 160. (Plate XLVI). A flat, oval piece of dark clay, reverse only slightly concave, obverse with one seal impression. Whether the area is round or oval is doubtful, as its lower limit is not defined. It has been registered as circular, with a diameter of ¾″. There is no device. Legend shows four aksharas across centre of field, which may be read with some reserve as *Mamalasa, i.e.*, '(the seal) of Mamala'. The Prakritic form (instead of the Sanskritic) agrees with the characters of the aksharas

in placing the seal at an early period, approximately the first century B. C. It was found at B′ 44 a 1, eleven feet deep. There are no duplicates.

No. 162. (Plate XLVI). A medium sized, round lump of black clay, slightly concave on reverse, with the deeply concave impression of a single seal on the obverse, the axis of which is at right angles to that of the hollow on the back. In the centre of the depression, which is oval in shape, measuring 1″×½″, is the device, in relief, namely a lion with open jaws standing to right. There is considerable life and vigour about the figure, but the most remarkable feature of it is, that the lion is definitely *winged*, with high, pointed wings rising vertically above the back and bending forwards at the tips. The tail is carried high, curling over the back. There is no legend, and no duplicates were met with. Findspot, B′ 44 a 1, eleven feet deep.

No. 163. (Plate XLVI). An irregularly round lump of reddish clay, with the impression of a single seal. The area is round, and approximately ¾″ in diameter, though the edge of it is not very well defined. There is no legend. The device, which is centrally placed, shows the figure of a lion standing, to right, over the prostrate form of some other animal, presumably a deer, whose head is bent back so as to be looking downwards. The forelegs of the lion are upon this figure, and his tail is swishing proudly in the air. The design is good, but unfortunately the present specimen is not in perfect condition, although it is fairly good, and no duplicates were recovered. Findspot, A′ 45 b 4, nine feet six inches deep.

No. 164. (Plate XLVI). A roundish piece of dark-coloured clay, very concave on reverse showing the impress of a single round seal, diameter 1″. The device is a humped bull reclining to left high in the upper field. The legend reads ; *Kajamitrasya, i.e.*, '(the seal) of Kajamitra'. Or is the initial perhaps a triangular form of the akshara *ma* with subscript vowel *u* ? The sealing was found at B′ 44 a 1, eleven feet deep, and there are no duplicates.

No. 165. (Plate XLVI). A medium sized lump of reddish clay with the single impression of a small round seal, whose area is ill-defined, but approximately ½″ in diameter. There is no legend, and the device is a simple rosette or flower within a circle. There seem to be twelve rays or petals. Findspot, B′ 44 a 1, eleven feet deep.

No. 166. (Plate XLVI). A medium sized lump of clay pinched into a high ridge, reverse very concave. Full upon the top of the sealing so formed, and thus obliterating the ridge in part, is the impress of the seal. Its form is rectangular, about ½″ by a little less, and it bears no legend. The device, however, is of interest, inasmuch as it is the highly conventional form of the so-called "Shield symbol," drawn in outline only. It was found at B′ 44 a 1, eleven feet deep. Seal No. 263 is a duplicate. It was found deeper still, *viz.*, 13′ 6″.

No. 167. Another specimen of the *Vyāghrabala* seal, found at B′ 43 d 1, eight feet six inches deep. The left edge is broken. Compare No. 14.

No. 168. (Plate XLVI). A flat, oval piece of clay, broken off at the top. The reverse is slightly concave. The seal impression, the surface of which is perfectly flat, shows an oval area, whose length, of course, is not determinable, but whose width is ¾″. The device, which is centrally disposed and takes up most of the space, is the very stately and heraldic figure of a maned lion, seated to left on a flat pedestal. The tail is held straight up the back. The legend is in rather ornate letters underneath

EXCAVATIONS AT BASARH.

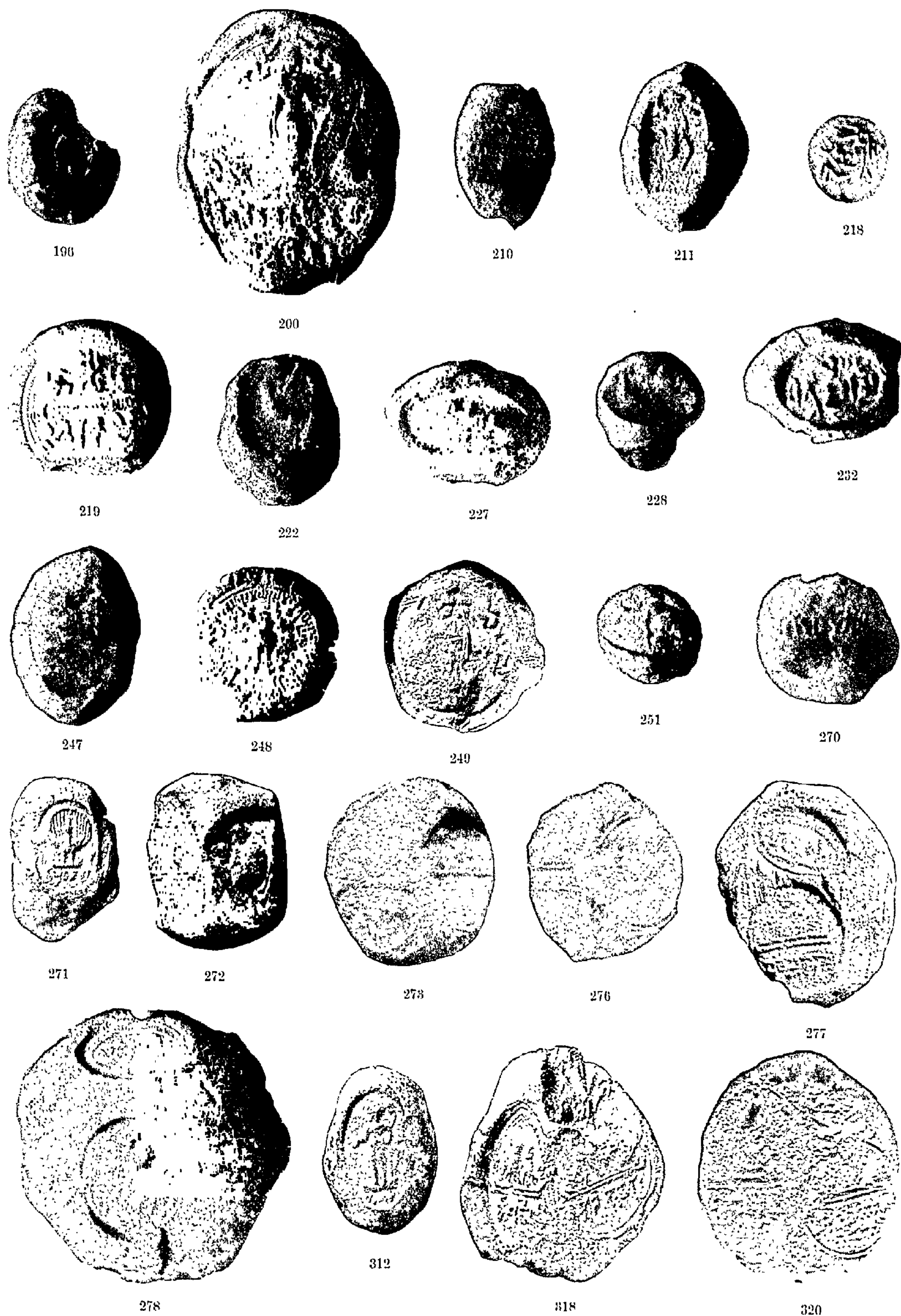


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this figure, and may be read with some reserve as ... *ttaputrasya—ntasya*. It is a double pity that both the proper names are obscure, because no duplicates were recovered. The sealing occurred at B′ 44 a 1, eleven feet deep, and is a very fine specimen despite its injuries.

No. 174. (Plate XLVI). A long, narrow pinch of clay, with the partial impress of a single seal stamped across the width of the sealing. The seal was apparently oval in reality, but its full size can not be determined. The width is $\frac{5}{8}$″. The device occupies the entire area, and is in the form of a lotus bud. There is no legend, and no duplicates. Findspot, B′ 44 a 2, twelve feet deep.

No. 177. A duplicate of No. 73, found at B′ 44 a 1, twelve feet deep.

No. 178. A black sealing with the impress of the *Bhadradāsasya* signet; found at B′ 44 a 2, twelve feet deep. Compare No. 70.

No. 188. (Plate XLVI). A small, round sealing, almost flat on reverse, with the impress of a single small oval seal, $\frac{1}{2}$″ × $\frac{5}{8}$″. There is no legend, the whole of the small area being taken up by the device, which is that of a human figure sitting on a sort of high hassock, to right, with his back against a very schematic tree. The present specimen, which is without duplicates, was found only seven feet deep in the square numbered A′ 40 d 2.

No. 191. (Plate XLVI). An oval sealing, concave on reverse, showing the impression of an oval seal whose area measures 1$\frac{1}{4}$″ × $\frac{5}{8}$″. The sides of the sealing have an almost bevelled effect. The device, which is centrally disposed, and occupies most of the area, is one of the most interesting in this collection. It is a figure of Nṛisiṁha seated on a high altar. He is facing, unless his face is intended to be turned slightly to the left. His right arm is raised, his left hand resting on his hip. The left knee is fully bent, so that the left foot rests upon the altar where he sits. The right leg hangs over the edge with the foot resting on the ground in what is called "the European fashion." The legend, which occurs in very small letters below this device, seems to have been twice impressed, and is obscured in consequence. I dare not publish any reading of it, although I do not think it is illegible. It seems to begin *Kumāra* - - -, but the rest is most uncertain. This is deplorable, because the seal has a very special excellence and dignity, and it is suggested that its owner was a person of importance. Moreover, so far as I am aware, it provides us with our oldest dateable representation of the deity Nṛisiṁha in India (the sealing is certainly of Gupta date), and it would be useful to assign it narrowly. It was found at B′ 43 a 3, at the great depth of 14′ 9″, and unfortunately no duplicates were found.

No. 192. Another of the *Nāgaśarmmasya* sealings, found at B′ 43 a 3, fourteen feet nine inches deep. Compare No. 55.

No. 193. (*cf.* Plate L, No. 778). A very poor specimen of a seal known from other examples to have a rectangular area measuring $\frac{7}{8}$″ by $\frac{5}{8}$″, and showing as its device two tall palm-trees side by side, with three horizontal lines below, the last two of which are connected together by criss-cross lines of a decorative nature. The legend occurs, as usual, below the device, in fairly large, sprawling aksharas, and reads *Kaṅkasya*, *i.e.*, '(the seal) of Kaṅka.' On the present example, only the two palm-trees occur, and even these are very faint. It was found at B′ 43 c 4, fourteen feet six inches deep. There are eight other specimens of the same sealing, numbered

209, 212, 216, 221, 612, 629, 632, and 778. Nos. 209 and 778 illustrate the maximum and minimum depths at which this type was met, 14′ 9″ and 7′ 6″ respectively.

No. 194. (Plate XLVI). A medium sized lump of clay, with the impress of a single seal with oval area measuring $\frac{3}{4}'' \times \frac{1}{2}''$. There is no legend, only the device of a humped bull, reclining to left. There are no special features, and no duplicates were recorded. It was found at B′ 43 c 4, fourteen feet six inches deep.

No. 196. (Plate XLVII). A fragmentary sealing in black clay, the upper right hand corner having been broken off. The seal impression is oval, $\frac{3}{4}'' \times \frac{5}{8}''$, and shows the rather unsuccessful figure of a lion, seated to left. The body is foreshortened, and the beast seems to be in the act of sitting down rather than to be seated. Whether there was originally a legend in addition to the device, I cannot be sure. There are various faint and uncertain marks in front of the lion which may be remains of lettering, but they are not now legible. The findspot was B′ 44 a 1, the depth 12′ 6″.

No. 197. Another of the *Nāgaśarmmasya* seals; *cf.* No. 55. Findspot, B′ 44 a 1, twelve feet six inches deep.

No. 198. *Vyāghrabala*, from B′ 43 c 2, 14′ 9″ deep; *cf.* No. 14.

No. 200. (Plate XLVII). A magnificent large official seal, oval, $2\frac{1}{4}'' \times 2''$, with a central figure of Lakshmī standing on a low pedestal, facing, with the two customary elephants above pouring water over her from jars held in their trunks. To her proper left is what looks like a large conch; to her right is an uncertain object. Below is a long line marking off the lower third of the field for the legend, which is in two lines. It reads *Vēśālīnāmakuṇḍē-kumārā* (2) *mātyādhikaraṇa* (*sya*). The expression *Vēśālīnāmakuṇḍē* is certainly surprising, but I cannot read the letters in any other way, and my reading is confirmed by an eminent authority to whom I showed the original. The legend appears to say that this is the seal 'of the Crown-Prince's Minister at the Kuṇḍa called Vēśālī.' Whether the word kuṇḍa means a sacred spring here, as is usual, or what it means, I cannot say. But there seems to be no doubt about the reading. The present specimen, which is unique, was found at A′ 40 3c only 6′ 6″ deep. It may be assigned to the fourth or fifth century of our era.

No. 201. *Nāgaśarmmasya*, from B′ 43 c 4, 14′ 9″ deep; *cf.* No. 55.

No. 208. A long narrow oval sealing with impress of a seal $1\frac{1}{4}'' \times \frac{3}{4}''$. The device is a female figure, presumably a goddess, standing, facing. There may have been a nimbus. Her right hand is outstretched; the left is held against the hip, but seems to clasp something in the nature of a wand, perhaps a lotus stalk. I believe there was a legend, originally, but now it is so defaced as to be barely visible. There are no certain duplicates of this sealing, which was found at A′ 40 c 3, 6′ 6″ deep.

No. 209. *Kaṅkasya*, from B′ 43 a 3, 14′ 9″ deep; *cf.* No. 193.

No. 210. (Plate XLVII). A medium sized piece of clay with the impress of a seal whose shape and area are not well defined; it has been registered as circular, diameter $\frac{3}{4}''$. There is no device, only the legend in two lines, (1) *(A)mātyabhadri kaputrasya*, (2) *(A)mātyahastabalasya*. *i.e.*, '(the seal) of the Minister Hastabala, son of the Minister Bhadrika'. Some of the letters are very faint, but I believe the reading is accurate. Findspot B′ 43 a 3, 14′ 9″ deep. The letters seem to me somewhat older than those of the Gupta period, perhaps 2nd century A. D.

No. 211. (Plate XLVII). An oval sealing, slightly concave underneath. The area of the seal impression is also oval measuring in its present condition about $1\frac{1}{8}'' \times \frac{5}{8}''$. The device is a divine figure, nimbate, which appears to be running forward. Both arms are upraised, which, with the circle of the nimbus, gives the figure a curious look as though it were running with a skipping rope! Whatever legend there was below this device is now lost. There are no duplicates. Findspot, B′ 46 d 4, only 3′ 9″ deep.

Nos. 212 and 216. Two more specimens of the *Kaṅkasya* seal, found at B′ 43 d 2 and B′ 44 a 4, the former 9′ 6″ deep, the latter 12′ deep.

No. 218. (Plate XLVII). A high-shouldered matrix of grey stone, with upright handle. The seal surface is flat and circular, $\frac{3}{4}''$ diameter. There is no device except a taurine, which in my judgment is an ancient Persian emblem on primitive seals and coins in India. The legend consists of a jumble of five very ancient aksharas irregularly placed. They read *Śujataśasa,* but the order of the letters is uncertain. The seal cannot be later than the Aśokan period. It was found at B′ 44 d 4, 12′ 4″ deep.

No. 219. (Plate XLVII). A large round token of dark clay, of which the lower edge is damaged. The seal impression is circular, $1\frac{1}{2}''$ diameter. A double hair line skirts the edge as a border. The field is divided into two equal parts by a single horizontal line, crossed by a multitude of little lines as decoration. In the centre of the upper field is the main device, which I take to be the most attenuated and conventional form of what is sometimes called the "Shield symbol," but which here looks like an ornate form of trident. To right and left of it are *swastikas.* Below the dividing line occurs the legend, which may be read with tolerable certainty as *Divērakasya, i.e.,* '(the seal) of Diveraka.' The lettering is, in my judgment, older than the Gupta period. But the token was found only six feet deep, at A′ 41 c 3.

No. 221. *Kaṅkasya,* from B′ 44 a 4, 12′ 6″ deep; *cf.* 193.

No. 222 (Plate XLVII). The incomplete impress of an oval seal on a lump of black clay. The area measure $\frac{3}{4}'' \times \frac{5}{8}''$. There is no legend, and the device, namely a humped bull standing to left, is indistinct. Findspot, B′ 40 b 3, 7′ deep. There are no duplicates.

No. 223. A black sealing with the deeply concave impress of a single seal, now wholly obliterated and unrecognizable. Found B′ 44 a 4, 13′ deep.

No. 226. A sealing of light red clay, reverse very concave. The seal has been carelessly impressed, and the details of the device are no longer clear. The legend is also very faint, but seems to read *Rājadharmēśvara(sya).* I can offer no interpretation, and am not sure that I have read the seal aright. It was found at B′ 44 a 4, 13′ 6″ deep.

No. 227 (Plate XLVII). An oval sealing with bevelled sides. The seal impression is oval measuring $1\frac{1}{4}'' \times \frac{1}{2}''$. The device is a humped bull reclining to left, and the legend, which is so faint as to be visible only in certain lights, appears to read *Bhadrarakshitasya i.e.,* '(the seal) of Bhadrarakshita.' Findspot, B′ 44 a 4, 13′ 6″ deep.

No. 228. (Plate XLVII). A broken sealing, with part only of the impression of a single long oval seal, whose dimensions appear as $\frac{7}{8}'' \times \frac{1}{2}''$ at present. The device is a humped bull reclining to left, and it is perhaps not impossible that it is in reality the same as No. 227. No legend is traceable, however, and the incomplete nature

of the impress makes it doubtful. It was found at the same place and at the same depth as the preceding.

No. 231. A thin, oval lump of clay which has been broken into two pieces across the centre; both fragments were recovered. The device is faint, but was seemingly what is called the "Shield symbol with crescent moon above to left." The legend is almost obliterated, but the syllables *Nāga ... sya* can be made out. Findspot B′ 44 a 4, fourteen feet deep.

No. 232. (Plate XLVII). A flat sealing in light coloured clay, flat because the under side has in some way been eaten away. The obverse, on the other hand, is unusually clear. The seal impression measures $\frac{7}{8}''$ by $\frac{5}{8}''$, and is an oval. The device is the most conventional form of conch or *śankha,* and the legend *Śarvvadāsaya, i.e.,* '(the seal) of Śarvvadāsa.' There are no duplicates of this interesting seal, which was found at B′ 44 a 4, fourteen feet deep.

No. 239. (*cf.* Plate XLVIII, No. 397). The impression of an oval seal, measuring $1\frac{1}{4}''\times\frac{3}{4}''$. The device is a fairly large humped bull reclining to left; there is a short straight line below almost like a pedestal or ground for the recumbent bull, but this figure is separated from it. The legend is below, and reads *Rudrarakshitasya, i.e.,* '(seal) of Rudrarakshita.' There are three other duplicates, numbered 264, 397 and 558. The present specimen was found at B′ 44 a 4, 13′ 6″ deep.

No. 247. (Plate XLVII). An oval sealing in light-coloured clay, very concave on reverse. The surface of the seal impression is flat, oval, $1''\times\frac{3}{4}''$, but the top was unfortunately damaged by the pickaxe. The device is an exceptionally fine heraldic lion, seated to left, and the legend, which occurs below in very ornate characters, reads *Vishṇudāsasya, i.e.,* '(the seal) of Vishṇudāsa.' The seal is one of unusual distinction, and is unique in this collection. It was found at B′ 44 a 4, 12′ 9″ deep.

No. 248. (Plate XLVII). A most important sealing in red clay. The impress is that of an oval seal, measuring $1\frac{1}{8}''\times 1''$. The device, which is a bull facing, stands in the centre with the legend in a continuous circle around the edge, giving to the whole an appearance most curiously like that of the modern departmental seals of the present Government of India. For the decipherment of this legend, whose importance was obvious from the first, I am indebted to Professor Rapson and Professor Venis. They read it: "*Rājnō Mahākshatrapasya Svāmī-Rudrasiṁhasya duhitu Rājnō Mahākshatrapasya Svāmī-Rudrasēnasya bhaginyā Mahādēvyā Prabhudamāyā(ḥ),*" *i.e.,* '(the seal) of the great Queen Prabhudamā, sister of the King the Mahākshatrapa Svāmī-Rudrasēna, and daughter of the King the Mahākshatrapa Svāmī-Rudrasiṁha.' This sealing was found at B′ 44 a 4, 12′ 9″ deep. No. 347 is a duplicate. Both are in good condition.

No. 249. (Plate XLVII). A round, flat sealing, with the impress of a round seal, diameter 1″. Unfortunately the seal impression has been badly damaged, and only one śankha and one akshara are now traceable. This is the more regrettable because the one akshara which is preserved is the final genitive ending *sa,* in a very ancient form. This alone shows that the seal was of considerable antiquity, as the *sa,* instead of the *sya* of later legends, proves that the inscription was in Prakrit, and the Prakrit seals are older than the Sanskrit. It was found at A′ 40 d 4, only six feet deep. There are no duplicates.

No. 251. (Plate XLVII). Impression of an oval seal, 1″×½″, without legend. The device is a rather well-drawn humped bull, reclining to left and filling the area. It was found at B′ 44 a 4, 13′ deep. There are no duplicates.

No. 261. Impression of a small oval seal, ⅝″×½″, without legend. The device is a small bull standing to left. Findspot, C′ 42 c 2, 6′ 6″ deep. No duplicates.

No. 262. (*cf.* Plate XLIX, bottom row). A pinch of clay, so reddish as to suggest that it has been baked. The reverse is very concave. The seal impression is on one of the two sloping sides. It shows an oval area 1″×⅝″. The legend, if there ever was one, is lost. The device is a tall spear standing erect, with a crescent above to left and what is probably a star to right. There are no duplicates of this sealing in this collection, but there is one in the Bhiṭā collection very similar; *cf.* No. 119 of Plate XXI in the A. S. R. for 1911-12. The findspot of the present specimen was B′ 44 a 4, 13′ 6″ deep.

No. 263. A duplicate of No. 166, found at B′ 44 a 4, 13′ 6″ deep.

No. 264. *Rudrarakshitasya*, found at B′ 44 a 4, 13′ 6″ deep; *cf.* No. 239.

No. 266. A reddish sealing, slightly broken at one side. The impression is that of a circular seal, ¾″ in diameter. The actual device is obliterated; below it are two parallel lines connected by diagonal lines forming a divisional band across the centre. The legend is below this, and, although very faint, seems to read *Dha-ra-bhu?-stha-rā.* This reading is, however, most uncertain; and I can offer no translation of it. It was found at B′ 44 a 4, 13′ 6″ deep. There are no duplicates of it.

No. 270. A sealing found at B′ 43 c 1, 13′ 9″ deep. It shows the impressions of two seals;

270-A.—(Plate XLVII). An oval, ⅞″×¾″. There is no device. The legend reads *(Śre)shṭhinigamasya, i.e.*, '(seal) of the Guild of Bankers.' There are no duplicates.[1]

270-B.—*Bhadradāsasya*, the same as on No. 70.

No. 271. (Plate XLVII). A pinch of clay rising to a ridge, but nevertheless showing the impression of one seal only, on one of its sloping sides. This reads, by analogy with its duplicates, *Vyāghrabalasya*, for which compare No. 14. The present specimen was found at B′ 43 c 1, 14′ deep.

No. 272. (Plate XLVII). A fairly large black sealing, pinched into a low ridge The two sides have been flattened in, which somewhat damages both impressions. It was found at B′ 40 b 2, only 7′ below the surface.

272-A.—Shows the impress of a round seal. The diameter is apparently one inch, but the one edge or side has been so compressed in that an exact measurement is not possible. This has at the same time completely obliterated the legend, but fortunately the device is unaffected. This appears as a fairly large and high-shouldered *kalaśa* or jar, with five small and very faint flower-stalks; below are two lines with slightly turned-up ends.

272-B.—Shows the impress of an oval seal. The outer edge is so broken that from this specimen we could not determine the size. From No. 318, a duplicate, it is evident that the seal measured 1¼″×¾″. The device is two *pādukas* above two lines, and of the legend only the letters *ga* and *si* are preserved. On 318, however, the legend can be read as *Nāgasiṁha*, and this perhaps gives us the clue to the other as well.

[1] This seal has got turned upside down in process of reproduction.

Dr. Bloch found several specimens of Nāgasiṁha's seal, in combination with other seals. One of those so associated with it was the seal of *Kulik-Omabhaṭṭa, i.e.*, '(the seal of) the Kulika Ūmabhaṭṭa.' This seal occurs in varying forms. One of them, described by Dr. Bloch under No. 87 (d) on p. 116 of the A. S. R. for 1903-04, is round, one inch in diameter, and has as its device a *kalaśa* and two lines without the usual *śankhas*. I gather, therefore, that our No. 272-A is really the seal of this Kulika Umabhaṭṭa, but as there is no mention of the five tiny flower-stalks in Dr. Bloch's specimen, I cannot be absolutely sure. Even on our sealing, though, these stalks are not only small but very faint. Possibly they did not show on the sealing found in 1904.

No. 273. A large sealing, concave on reverse, with unusually deep cord marks. It was found at B′ 40 b 2, 7′ deep and shows the impressions of two seals :

273-A.—(*cf.* Plate XLVII, No. 276) is circular, about one inch in diameter. The device is described by Dr. Bloch as "a hemispherical object, perhaps money-chest, with lid on top." I am inclined to doubt this interpretation, but I must admit that I cannot improve on it. The object is not hemispherical, really, but rather in the shape of the "Shield symbol," with something like a handle on the top. I do not mean to imply, however, that there is any connexion between the two. Whatever it is, there are two long horizontal lines underneath it, the upper of which is shorter than the lower, and underneath these occurs the legend in two lines. It reads *Śre-shṭhi-sārtthavāha-kuli*, (2) *kanigamā, i.e.*, '(the seal of) the Guild of Bankers, Traders and "Merchants,"' according to Dr. Bloch. The word Kulika is of doubtful significance; *cf.* what has been said on this subject above, page 68.

273-B. The second impression is that of an oval seal, measuring $1\frac{1}{4}'' \times \frac{3}{4}''$. It shows no legend, the entire area being occupied by the device, which is what was designated by Dr. Bloch "a decorated wheel." This is the only example of this device included in this collection.

As to the former, 273 A, we have four duplicates, Nos. 274 (where it is combined with the seal of Gomisvami), 276 (with Gomisvami as before), 320 (with Bhavasena's seal), and 321 (combined with the seal of Īśānadāsa). It is, however, one of the commonest types in Dr. Bloch's collection, for he records the discovery of no less than 274 specimens of it! He does not, so far as I see, make specific mention of it in combination with the decorative wheel motif, but he nevertheless publishes what is the exact counterpart of our present sealing as No. 46 on Pl. XLII.

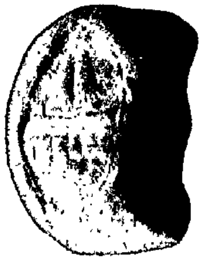
I would add that sealing No. 273 as a whole is a singularly perfect specimen of an Indian commercial seal.

No. 274. Another commercial sealing of the same general class as the preceding, and found at the same place and at the same depth. It too shows the impressions of two seals, as follows :

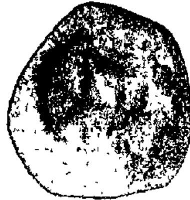
274-A. A duplicate of 273-A.

274-B. (*cf.* Plate XLVII, No. 276). A long, narrow oval seal, $1\frac{1}{4}'' \times \frac{1}{2}''$, with two *pādukas* over two lines as its device. The legend reads *Gōmisvāmi*. We have one duplicate in No. 276 B, and Dr. Bloch also found the same type; *cf.* A. S. R. 1903-04, p. 113, No. 60. The present specimen was found at B′ 40 b 2, seven feet below the surface.

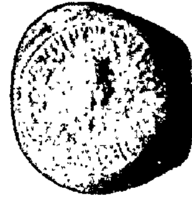
EXCAVATIONS AT BASARH.

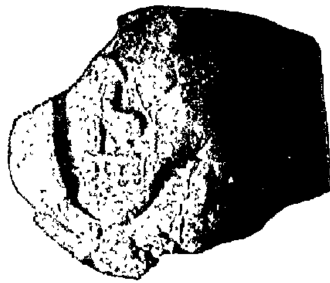

321

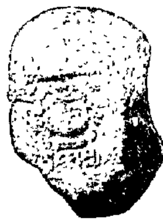

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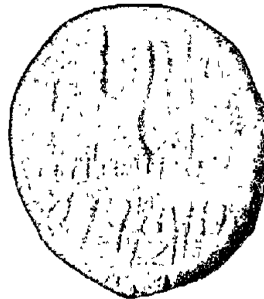

342

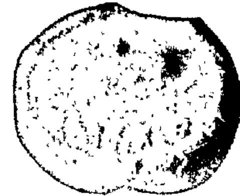

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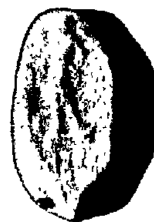

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No. 275. (Plate XLVII). Another large round sealing with the impression of two seals. It also was found at the same place as the preceding, and at the same depth:

275-A. Impress of a large oval seal, $1\frac{1}{4}'' \times \frac{7}{8}''$. The device is a decorated wheel with a small śankha on either side of it; a single horizontal line below. Legend, *Gomikasya, i.e.*, '(the seal) of Gomika.'

275-B. A circular impress, about one inch in diameter. The device is a *kalaśa* with two *śankhas* and two horizontal lines below. The legend is obliterated, but it evidently began with the word *Kulika* as the device itself would suggest. But I doubt if we can tell which Kulika it was.

This sealing is particularly interesting for the following reason. Dr. Bloch did not find any precisely like it, apparently, but he did evidently find a seal of this same Gomika's son. No. 59 of the Bloch collection (p. 113 of the A. S. R. for 1903-04) reads "Gomika-putrasya Śreshṭhi-Kuloṭasya," *i.e.*, '(seal) of the Banker, Kuloṭa, son of Gomika,' and there is no doubt but what here we have the seal of Gomika himself. It might seem hazardous to make an affirmation of this kind, were it not for the interesting fact that the son has kept to the general style of his father's seal, for the device on our present specimen is the same as that on the seal of Kuloṭa. From this we may legitimately infer that Gomika also was a banker, and a successful one, or his son would not so proudly add his father's name to his own signet. It is instructive to note that Gomika did not apparently have a like pride in *his* father!

My analytical index to the Bloch collection ought normally to aid in determining the identity of the seal No. 275-B, but unfortunately the type in question is too common. There are seven Kulikas who use seals with the device of a *kalaśa* with two *śankhas* and two lines, and it is not easy to determine which of the seven, if any, we have here.

No. 276. (Plate XLVII). A double seal, both impressions being duplicates of 273 A and 274 B respectively. Findspot and depth as before.

No. 277. (Plate XLVII). A large double sealing, with one edge broken. Found at B′ 40 b 2, seven feet deep. The two impressions are:

277-A. A round seal, something less than one inch in diameter. Device, a *kalaśa*, with very small flower stalks, and two horizontal lines underneath. From a duplicate published by Dr. Bloch (see p. 117 of A. S. R., 1903-04, No. 99) the legend may be read as *Prathama-Kulika-Hariḥ, i.e.*, '(seal of) the Chief Kulika, Hari'. No. 278 A in the present collection is a duplicate.

277-B. A pointed oval seal, with decorated border, but no device. The legend is recognizable from those published by Dr. Bloch as *Prakāśanandi*. Here it is indistinct. Bloch, I may note, (*cf.* A. S. R. 1903-04, Pl. XLII, figs. 36 and 42) found 15 examples of this seal. We have two, the other being No. 278 B. Of our 277 A Bloch records 23 specimens.

No. 278. (Plate XLVII). A much larger lump of clay than the preceding, but recovered at the same place and same depth, and showing two seal impressions identical with those of No. 277.

No. 279. *Vishṇudāsa*, from B′ 43 d 2, 14′ 3″ deep; *cf.* No. 8.

No. 281. *Nāgaśarmmasya*, from A′ 44 d 4, 9′ 6″ deep; *cf.* No. 55.

No. 282. A double sealing, found at B′ 44 a 1, 15′ 6″ deep.

282-A. *Vyāghravalasya, cf.* No. 14.

282-B. *Śreshṭhinigamasya, cf.* No. 8 B.

No. 286. A double sealing, from B′ 44 a 3, 15′ 8″ deep:

286-A. As 282 B.

286-B. *Bhadradāsasya, cf.* No. 70.

No. 288. Duplicate of No. 73, found at B′ 44 a 3, 15′ 8″ deep.

No. 289. The broken impression of an oval seal, one inch long. The device is a heraldic lion, seated to left, his tail in a curiously stiff and straight line over his back. The legend is missing. Findspot, B′ 44 a 3, 15′ 8″ deep. No duplicates.

No. 296. Impression of a round seal, $\frac{3}{4}$″ diameter. The device is a humped bull reclining to left. The legend is illegible. Found B′ 42 c 4, 9′ deep. No duplicates.

No. 298. *Vishṇudāsa*, from B′ 40 d 1, 8′ 3″ deep; *cf.* No. 8.

No. 303. Impression of a small round seal, $\frac{5}{8}$″ in diameter. There is no device, only the legend, in four very square aksharas. It appears to begin *Vishṇu—*, but I cannot read the rest. It was found at B′ 40 d 2, 8′ deep, and is unique.

No. 312. (Plate XLVII). Impression of an oval seal, 1″×$\frac{1}{2}$″, found at B′ 42 b 2, 11′ deep. The legend is illegible, the device is a standing female, facing; her right hand is extended, the left clasps a tall lotus which rises above her shoulder. No. 446 is a duplicate.

No. 318. (Plate XLVII). A double sealing, found at A′ 39 c 4, 7′ 3″ deep:

318-A. A round seal, $\frac{7}{8}$″ in diameter. The top portion has been rather badly injured, but the device is clear as a *kalaśa* with small *śankhas* to right and left, and two lines below, with turned-up ends. The legend is in very well-raised aksharas, and reads *Kulika-Hariḥ*, even the *visarga* being quite distinct. The seal is described by Dr. Bloch under No. 76 on p. 114 of the A. S. R. for 1903-04, and illustrated as fig. 37 on Plate XLII.

318-B. A very good example of the seal of *Nāgasiṁha, cf.* No. 272 B.

No. 320. (Plate XLVII). A double sealing, from A′ 39 c 2, 4′ 6″ deep:

320-A. The seal of the *Śreshṭhi-sārtthavāha-kulika-nigama*, as on No. 273 A.

320-B. Impress of an oval seal, 1$\frac{1}{2}$″×1″. The device is what Dr. Bloch called a "shield," by which he meant an oval boss surrounded by two encircling rings. On our present example, where it is a little unclear, it resembles a wheel, and could be easily mistaken for one. Dr. Bloch found 35 specimens, and his description is therefore certain. Underneath the device are two lines, one very short one, the other longer. The legend reads *Bhavasena*. *Cf.* A. S. R. 1903-04, p. 112, No. 50, and Dr. Bloch's Plate XLI, fig. 21. Curiously enough, we have only this single specimen.

No. 321. (Plate XLVII). A double sealing, from A′ 39 c 2, 4′ 6″ deep:

321-A. Duplicate of No. 273 A.

321-B. Impress of an oval seal, 1″×$\frac{5}{8}$″. The device is two *pādukas* above two lines, and the legend reads: *Īśānadāsasya, i.e.*, '(seal) of Īśānadāsa.' Dr. Bloch recovered 75 specimens of this same seal and in this same combination; *cf.* A. S. R. 1903-04, p. 114, No. 66.

No. 325. (Plate XLVII). A small, broken sealing, with the impress of an oval seal, $\frac{3}{4}$″×$\frac{1}{2}$″. The device is a well-executed boar, recumbent to left. The legend

would have been perfectly legible if it had not been for the break. As it is, the first syllables are lost, and only ... *kakindaḥ* can be read. It was found at B′ 44 a 2, 4′ 6″ deep. There are no duplicates, and Dr. Bloch does not seem to have found any instance of this type.

No. 326. Impress of an oval seal, $\frac{3}{4}'' \times \frac{1}{2}''$. There is no legend. The device is a small lion (?) perhaps standing to right. The animal is not very well drawn, and the impression is not perfect. Findspot, A′ 39 c 2, 7′ 3″ deep.

No. 337. A thick, heavy lump of clay the under side of which has been badly eaten away. The impress is that of a round seal, $\frac{3}{4}''$ in diameter. The device is a small *kalaśa* with an uncertain number of small flower stalks. There appears to be no dividing line underneath. The legend is exceedingly faint, and most uncertain, but I believe that it begins *Bhadrika*—. I can find no parallel to it in the Bloch collection. No. 339 seems to be a duplicate. No. 337 was found at A′ 45 a 4, 12′ 9″ deep.

No. 339. A sealing very similar to the preceding, and believed to be a duplicate of it. Found at A′ 44 d 2, 12′ 9″ deep.

No. 341. (Plate XLVIII). A very beautiful seal. The sealing itself is a thick lump of very pale clay, very concave on reverse. The impression is that of a square oval seal, with double hair-line border. The measurements are $\frac{7}{8}'' \times \frac{3}{4}''$. There may have been a legend, but it is doubtful. The device is exceptionally interesting from the artistic point of view. It shows the figure of a spirited horse galloping to left with the well drawn figure of a boar running to right in the foreground. It was found at A′ 45 a 4, twelve feet deep. No. 363 is a duplicate.

No. 342. (Plate XLVIII). A flat, oval sealing with strangely convex reverse. The impression is that of a large oval seal, $1\frac{1}{4}'' \times 1''$. The surface is blurred. Device either what Dr. Bloch calls a " shield " (a boss with surrounding circles or rings) or a " decorated wheel," it is not certain which. Small *śankhas* to right and left, and two horizontal lines below. The legend may be read with some reserve as *Manorasya* *i.e.*, '(the seal) of Manora.' I am specially uncertain about the second syllable. Findspot, C′ 46 a 2, seven feet deep.

No. 343. A sealing found at A′ 45 a 4, 12′ 9″ deep. It does not show the impress of any true seal, but merely a circular depression, $\frac{1}{2}''$ in diameter, where some round object has been pressed into the clay over a piece of cloth, the warp and woof of which have left their imprint. Evidently the expedient of the moment, in the absence of the writer's real signet.

No. 344. Another impromptu sealing, like No. 343, and found in the same place and at the same depth.

No. 347. (Plate XLVIII). A duplicate of the important seal of the *Mahādēvī Prabhudamā*, found in spoil earth ; *cf.* No. 248.

No. 356. (Plate XLVIII). A sealing found at A′ 44 d 2, thirteen feet deep. The area of the impression is oval, $1'' \times \frac{5}{8}''$. The device is a lion half seated to left, on a base line as pedestal. The animal is disproportionately tall. The legend occurs below and reads *Kaṇadāsa*. No. 379 is a duplicate. The sealing itself, I may add, is a large lump of dark coloured clay, very badly disintegrated on the reverse.

No. 359. *Nāgaśarmmasya*, found at A′ 44 d 2, thirteen feet deep ; *cf.* No. 55.

No. 363. (*cf.* Plate XLVIII, No. 341). A duplicate of the fine seal with the horse and the boar, No. 341. Findspot, A′ 45 a 4, thirteen feet five inches deep.

No. 364. (Plate XLVIII). Impression of rectangular seal, $\frac{5}{8}'' \times \frac{1}{2}''$. The device, which takes up practically the whole of the area, is an unusually ornate form of urn or *kalaśa*, with handles on either side, and filled with overhanging flowers or foliage. The legend is crowded into a narrow space below this urn, and reads *Vīradāsasya*, *i.e.*, '(the seal) of Vīradāsa.' There are no duplicates. Findspot, A′ 45 a 4, 13′ 5″ deep. A seal of some distinction. I should also note that in the upper corners are tiny figures of the crescent moon, (left) and what is either the sun or a star, (right).

No. 367. (Plate XLVIII). A sealing with no seal impression, merely a lot of rough, jagged marks, made in the clay, apparently in the absence of a proper seal. Findspot, A′ 45 a 4, 13′ 6″ deep. No. 436 is similar.

No. 369. (Plate XLVIII). A very fine temple seal, in magnificent condition. The sealing is a large circle, rather thin, and only slightly concave on reverse. The impression covers the entire face, and measures $1\frac{1}{2}''$ in diameter. The field is divided into two by a ribbon-like band running horizontally a little below the true centre. Above this are five objects, some of which are difficult to define. From left to right they appear as : (1) a tall vase with radiating rays or flower-stalks ; (2) something that looks like a tall and slender tree, such as a poplar, not that I suppose it is a poplar in reality ; (3) the central figure, which has the outline of a stouter tree with spreading base ; (4) a battleaxe to left surmounted by a trident ; (5) a *kalaśa* with rays or flower-stalks. In the lower field, below the dividing band, occurs the legend, in large and sprawling characters older than those of the Gupta period. It reads : *Aramikīś-varasya*, *i.e.*, '(seal of the temple) of Aramikīśvara.' Findspot, C′ 40 a 2, eleven feet deep. No. 396 is a duplicate.

No. 379. *Kaṇa(dāsa)*, from A′ 45 a 4, 13′ 9″ deep ; *cf.* No. 356.

No. 396. (*cf.* Plate XLVIII, No. 369). *Aramikīśvarasya*, found B′ 45 b 2, 8′ 6″ deep ; *cf.* No. 369. The present specimen is not in such good condition as the former.

No. 397. (Plate XLVIII). *Rudrarakshitasya*, found at B′ 44 a 2, sixteen feet deep ; *cf.* No. 239.

No. 398. (Plate XLVIII). *Yajnasōmasya*, from C′ 45 a 4, 8′ 6″ deep ; *cf.* No. 9.

No. 400. A very small, round token, less than a half inch in diameter, found at B′ 42 d 1, 6′ deep. There is no device, and the lettering, which I judge to be of an early period and irregularly spaced, is exceedingly faint.

No. 404. A double sealing, found at B′ 42 d 2, 6′ 3″ deep. The two impressions are duplicates of No. 8 A and 8 B respectively.

No. 410. (Plate XLVIII). A rather good seal, of which unfortunately the right-hand side is missing. The device is a humped bull, reclining to left. The legend reads : *Amradāsaḥ*. Findspot, B′ 42 d 1, 6′ 6″ deep. There are no duplicates.

No. 411. (Plate XLVIII). The badly worn impress of an oval seal, $1\frac{1}{4}'' \times \frac{7}{8}''$, found at B′ 42 d 1, 6′ 6″ deep. The device is a battle-axe or similar object, with blade pointing downwards. The legend is illegible, and there are no duplicates.

No. 418. (Plate XLVIII). Impress of a small, oval seal, $\frac{7}{8}'' \times \frac{1}{2}''$. The device is a small humped bull recumbent, to left, the head being well raised. The legend

is not certain; it may read *Kadrisya*, *i.e.*, '(seal) of Kadri,' but the second akshara is not clear. Findspot, B′ 42 d 1, 6′ 6″ deep. No duplicates.

No. 419. (Plate XLVIII). A long oval sealing, rising to a ridge, and showing the impressions of two signets. It was found at B′ 42 d 1, seven feet below the surface. There are no duplicates of either seal:

419-A. Impress of an oval seal, whose surface, although incomplete measures now $1'' \times \frac{3}{4}''$. The device is peculiar, a full-blown lotus resting on or rising from a curious stand shaped rather like an angular hour-glass, across the centre of which runs a ribbon with turned-up ends. The legend reads: *Nārāyaṇadāsa*.

419-B. Impress of another oval seal, with indeterminate edges; the measurements at present are as before. The field is divided below the true centre by a horizontal band consisting of two parallel lines connected by short cross lines. Above this is the main device, a very fine, naturalistic, spreading tree, quite exceptionally well drawn. To either side is an uncertain object, whether a *kalaśa* or what Dr. Bloch styled a money-chest cannot be determined. The legend is below, but it is exceedingly faint. Apparently it ended with the word *nigama*, meaning 'Guild,' but even this much is doubtful.

No. 421. (Plate XLVIII). A small, black sealing, found at C′ 45 a 4, 9′ 6″ deep, with no device. The area is an oval, $\frac{7}{8}'' \times \frac{1}{2}''$, and is filled only by the legend, *Vishṇumitra*. There are no duplicates.

No. 422. (Plate XLVIII). The concave impress of an oval seal, $1'' \times \frac{1}{2}''$, found at C′ 45 c 4, nine feet deep. The device is a battle-axe, with long handle, laid lengthwise of the seal. The legend, which contains many aksharas, occurs both above and below this device, but the letters are extremely small and no longer legible on this, our only specimen. They seem to end with *dattasya*.

No. 436. A high-backed pinch of clay, with jagged marks on one of its two faces, and a proper seal impression on the other. The seal seems to have had a circular area, but it is now too faint to be deciphered. The sealing was found at B′ 46 b 2, nine feet deep.

No. 446. (Plate XLVIII). Impress of an oval seal, $1'' \times \frac{1}{2}''$, with the standing figure of a goddess, facing. Her right hand is outstretched; in the left she holds the long stalk of a lotus which rises beyond the shoulder, almost to the same height as the main figure. The legend below is in very tiny letters, which I cannot make out. Findspot, B′ 42 d 1, 7′ 6″ deep. No. 312, (Plate XLVII), is apparently a duplicate.

No. 449. (Plate XLVIII). A high-backed sealing with seal impression on one face only. This shows an oval area, incomplete. The device is a small and very schematic conch, in outline. The legend is in well raised aksharas, but the beginning is damaged. It seems to end ... *puratīrtha*, but the reading is uncertain. It was found at B′ 44 a 2, at the great depth of sixteen feet, and is unique in this collection.

No. 450. Sealing found at B′ 42 d 1, 7′ 6″ deep, with the worn impress of an oval seal. Device, humped bull, reclining to left. Legend so faint as to be illegible. No duplicates.

No. 453. (Plate XLVIII). Sealing found accidentally on the edge of the moat, not in excavation. The impress is oval, $1\frac{1}{4}'' \times \frac{3}{4}''$, and shows as device a humped bull to left. The legend is illegible, but the whole is rather like the *Rudrarakshitasya* type, *cf*. No. 239. But there is no sign of the base line in the present specimen.

No. 455. (Plate XLVIII). From A′ 40 b 1, 12′ 3″ deep. Impress of an oval seal, $\frac{7}{8}'' \times \frac{5}{8}''$. Device, lion, standing, to left; head damaged. There is no legend.

No. 456. (Plate XLVIII). A high, round sealing, with sloping sides, found at B′ 43 a 4, eight feet deep. The impress is a deep concave and circular area, $\frac{5}{8}''$ in diameter. The device is a very small bull standing to right. The legend is in a curve following the lower edge, and is in unusually fine and delicate lettering, which I cannot make out. It commences *Kumāra* (that much I believe is certain), but the rest is not clear.

No. 477. *Nāgaśarmmasya*, from spoil earth; *cf*. No. 55.

No. 482. (Plate XLVIII). Impress of a large oval seal, $1\frac{3}{4}'' \times \frac{7}{8}''$. The device is a tall vase on a base line as pedestal, in the centre of the upper field. On its left is what seems to be a rod or standard of some sort, and on its right a group of four reed-like objects, upright. Above to right and left respectively, are figures of the sun (or a star) and the crescent moon. Below all, and dividing the field into nearly equal parts, is a wavy line. The legend is below this, and seems to read *Sharṇḍakapuri*—. But I cannot be sure that the last three aksharas do not spell *kumāri* instead! Unfortunately, there are no duplicates. Findspot B′ 44 a 4, at the great depth of sixteen feet three inches.

No. 485. (Plate XLIX). Impression of a large round oval seal, $1\frac{1}{4}'' \times 1''$, found at B′ 44 a 4, 16′ 6″ deep. The device is a very heraldic lion, seated, to left, on short base line as pedestal. In front of him is what appears to be an upright staff with something like a pennant. Below is the legend, which is faint and uncertain. It appears to read: *maramana*—. There are no duplicates.

No. 486. A neat, high pinch of clay, without defined impression. The long axis has been cleft at top or indented as by the edge of a square object, so that the impress is V-shaped in section. Findspot, B′ 44 a 4, 16′ 6″ deep.

No. 488. (Plate XLIX). A tall, conical matrix, of terracotta, top broken off. The impression shows a humped bull, standing, to left. The legend occurs both above and below. In the upper line the aksharas appear to read (*?Mahānandi-*)*putrasya*, and in the line below, *Chandikasya*, but the reading is very uncertain. The area is oval, $1\frac{1}{4}'' \times 1''$, and the matrix was found at B′ 42 c 2, at a depth of 12′ 6″. There are, of course, no duplicates; and no impressions of this seal were found.

No. 489. (Plate XLIX). A flat, round token, with the impress of a circular seal, diam. $\frac{7}{8}''$. Except on the left, the edge of the impression is obliterated. From the part now remaining the whole appears to have had a narrow edge of dentilled ornament. The device is a pair of small *pādukas* high in the upper field. Below these, and occupying the middle field, are what seem to have been perhaps two large aksharas, now uncertain. Below is the legend, *Nārāyaṇa*(*sya*), *i.e.*, '(seal) of Nārāyaṇa.' Found at C′ 45 a 4, between eight and nine feet deep.

No. 494. (Plate XLIX). A flat oval sealing, with faint traces of a cord on the reverse. It was apparently pointed originally, but both points are broken off. The sealing itself is of fair size, but the seal impression is very small. It is an oval, measuring $\frac{3}{4}'' \times \frac{1}{2}''$, and was found at a depth of only 3″ at 15 c 4. For description see above, page 70.

No. 527. (Plate XLIX). An oval sealing, concave on reverse. The impression is an oval, $\frac{7}{8}'' \times \frac{5}{8}''$. The device is a well modelled humped bull, reclining to left, on a

EXCAVATIONS AT BASARH

485 458 459 494 527

556 557 557 559 572

572 574 575 579 580

588 590 603 604 606 607

620 624 626 630 649 650

[illegible]

very thick, horizontal base line as pedestal. The legend is inscribed below this line, in very delicate aksharas. It reads *Kaṇaśasya, i.e.,* '(seal) of Kaṇaśa.' The seal is in fairly good condition. There are no duplicates. Findspot B′ 43 b 2, 6′ 6″ deep.

No. 534. Another example of the *Nāgaśarmmasya* seal, found at A′ 42 b 2, 4′ 6″ deep. Compare No. 55.

No. 535. An irregular sphere of clay, more like a token than a true sealing. The impression, which is very faint, is that of an oval seal, measuring 1″×⅝″. The device is a pair of *pāduka*·, seemingly with horizontal line below, but all the lower part of the impression, including the legend, is obliterated. There are no duplicates. Findspot, A′ 42 b 2, 4′ 6″ deep.

No. 556. (Plate XLIX). A very large and fine sealing, concave on reverse, bearing the impressions of three separate seals:

556-A. The upper left hand impression, is that of an oval seal, 1⅛″×⅝″, but the face is so badly cut across obliquely that the precise nature of the device is no longer determinable. It appears to have been something like a conventional tree rising from a base line. There is no sign of any legend ever having existed.

556-B. The upper right hand impression, is also that of an oval seal, ⅞″×⅝″. The device is a highly conventional form of the so-called "Shield motif," resting on a square base like a platform or altar (*cf.* Pl. XLIX, No. 557 B). The legend, which occurs below, is not very clear. It seems to read *Mukaśa·ya, i.e.,* '(seal) of Mukaśa.' The same seal occurs on No. 557 B, but otherwise there are no duplicates.

556-C (Plate XLIX) is the impress of a round seal, ¾″ in diameter. The device is a spreading but conventional tree, rising from a heavy pyramidal base. The right hand portion of the legend is defaced, but the left half reads: *Ṣreshṭhi-ku(li)ka*—— The meaning of such legends is discussed above, on page 68, in connexion with seal No. 708.

Sealing No. 556 was found at A′ 42 d 2, 7′ 3″ deep.

No. 557. (Plate XLIX). Another sealing with three impressions, found at the same place and at the same depth as No. 556 above:

557-A. The upper left hand impress, is that of an oval seal measuring in its present incomplete condition 1″×⅝″. The device is a wheel, with horizontal line below, and the legend appears to read *Dhana-sya*, the third akshara being illegible to me. This seal, be it noted, is evidently not a duplicate of 556 A, which is remarkable because the other two impressions on this clay, 557 B and 557 C, are duplicates of 556 B and 556 C, respectively. In the case of 557 C, though, I should add that a crescent moon is visible, above, to right, which is lost in the other specimen. There was presumably a corresponding star or sun above to left, originally, but it is not now traceable.

No. 558 is a double sealing, found in association with the foregoing, at A′ 42 d 2, also 7′ 3″ deep.

558-A is a duplicate of the *Rudrarakshitasya* seal No. 239.

558-B is only fragmentary, showing the left hand side of an impress made with an oval seal whose dimensions cannot be fixed. The device seems to have been a stūpa in the centre, with one tree on the (proper) right, now preserved, and presumably another on the left, of which, however, no trace remains. I am not sure about

the legend. Three aksharas are traceable, but the first is very faint and illegible. The second is either *ku* or *dā*, and the last seems to have been a *śa* (if not a *ga* ?). The sealing as a whole is in very poor condition.

No. 559. (Plate XLIX). Impress of an oval seal, $\frac{7}{8}'' \times \frac{1}{2}''$. The device is a large and very well modelled humped bull, reclining to left on a broad base line as pedestal. The figure of the bull stands out in high relief, and fills practically the whole area. There is no legend, and there are no duplicates. Findspot, A′ 42 d 2, 7′ 3″ deep.

No. 560. A large, thick, pointed sealing, with the impress of some small rectangular object in a sort of oval depression. The area is not defined, and the impress was apparently not made by a true seal. Findspot, A′ 42 d 2, 7′ 3″ deep. There are no duplicates.

No. 572. (Plate XLIX). An unusually large and interesting sealing, long and narrow in form, and originally pointed, but both ends are now broken off. The reverse side is deeply concave and shows cord marks along the short axis. The sealing was found at A′ 42 d 2, 7′ 6″ deep, and bears four seal impressions, two each from two separate seals.

572-A and B are both alike and occur on the left side and in the upper half of the top surface of the sealing, the latter being by far the better impression of the two. The area is a large oval, $1\frac{1}{8}'' \times \frac{3}{4}''$, and the device is of extraordinary interest. We see a tall, well built male figure, nude, standing, to left, with graceful draperies floating to either side. The left arm is bent, with the hand resting naturally on the hip ; the right arm is extended toward the left, the hand being held out above a very neatly drawn figure of the so-called shield motif which fills the exergue left and rests on a short base line as pedestal, which, in turn, stands on the broader base line supporting the main figure. This shield motif rises to about the middle of the man's thigh, and thus its size and height in relation to the main figure are approximately those of the fire-altar common in this identical position on Kushaṇa coinage. The posture of the main figure in relation to this shield motif is also precisely that of the Kushaṇa monarchs to the fire-altar on their coins, so that had this motif been broken off and missing on our sealing, one would have inferred inevitably from the pose of the male figure, that a fire-altar had occupied this space. This, it appears to me, may afford us at last a clue to the real nature and significance of this enigmatic symbol. The position and rôle of the motif here are identically those of the fire-altar, and curiously enough certain potsherds, found in the course of Mr. Ratan Tata's excavations at Pāṭaliputra not only confirm this interpretation of this shield motif, but also explain its origin. These potsherds show fine heraldic figures of the Persian fire-altar emblazoned in high relief. The outline is that of the fire-altar seen, for example, on the façade of Darius's tomb, but the point of interest is, that each of these fire-altars is impressed in the midst of a pronounced incuse, the outline of which is so conspicuous, that it itself first meets the eye, before the main figure is perceived. This outline of the incuse betrays conventional treatment in itself, and as it follows the general form of the fire-altar emblazoned within it, it comes to bear a shape strikingly like that of the so-called shield-motif we have here. The figure on the present Basarh seal shows a conventional development of the base, where the ends are as usual curved upwards in artistic fashion, and

the same tendency is observable in the two outer of the three points above, but there is no gainsaying the striking similarity in essential outline between the Pāṭaliputra incuse and the shield motif as we see it here. The former, I should add, also has three points above, corresponding to the three flames of the altar. When, then, we find here a figure so strongly resembling this incuse around the fire-altar, and can see that in size and position and indeed in function, this figure corresponds so minutely with the fire-altar itself, it would seem to me that we are at last enabled to suggest an interpretation of the shield motif which is highly reasonable. It is a conventional symbol for the fire-altar itself, originating historically from the practice of emblazoning such altars in an incuse. I may add, moreover, that this suggested Persian character of the shield motif is to my mind borne out by the symbolism with which the same motif is associated on one of the seals recovered at Bhīṭā by Sir John Marshall, No. 44 on Plate XIX in Sir John's Annual for 1911-12. Here we see in the centre of the composition the Mithraic bull, with the Sassasian sphere between its horns; the shield motif stands to the left rather as in our specimen here, and to the right is a wheel. That Persian or Mithraic influence is recognizable in this Bhīṭā sealing seems to me clear, and also to be clearly confirmed by the Basarh specimen. Moreover, a further feature of the Basarh seal remains to be mentioned which also supports the assumption of Western Asiatic influence, and this is the extraordinary fact, that despite the human character of the well modelled figure, the apparent "man" has an unmistakable *bird's head*! That human-headed bulls and animal-headed human monsters are common-places in Mesopotamian and Persepolitan art, is of course known to everybody. This point, therefore, seems in harmony with the rest of the evidence detailed above, for a Persian interpretation of the shield motif, as such. And I would note that this symbol is associated with Buddhism peculiarly from very early times, as it occurs for instance on the Bharhut rail, which is quite harmonious with my recently published theory as to the Persian background behind the Buddhist system, from the beginning. There is a fairly long legend on Seal 572 A and B, also, and if this could only be read and interpreted with certainty, it might settle the question beyond challenge; but unfortunately, I cannot be sure of its real reading, although I think it may be read some day by better eyes than mine. To me it seems to read *Amatakaṇarenanī*, but although most of the individual aksharas seem reasonably certain, my inability to understand the whole, makes me doubt the reading. Is it perchance as exotic as the symbolism? For that the whole is Western Asiatic in feeling is further evidenced by the faintly indicated wing of the main figure, visible to right below the left elbow of the standing hawk-headed man.

572-C and D are also alike, and occur on the lower portion of the top surface, and on the right side of the sealing respectively. The one lettered C is incomplete but D is very nearly perfect. The area is an oval, $1'' \times \frac{3}{4}''$, and the device is a very bold, heraldic lion, sejant, to left, with tail held high above the back. The animal rests on a square base or pedestal, and bears a considerable resemblance, by accident or otherwise, to the big lion on top of the supposedly Mauryan column at Bakhra in the immediate vicinity of the Basarh citadel where the seal was found. The legend seems clear enough, but still I am not quite sure about it; it appears to read

Baladhikṛitadati, but beyond assuming that it must be the seal of some high military authority, I can suggest nothing by way of interpretation. There is no trace of the long vowel one would expect over the akshara *la*, and I am doubtful about the vowel *ṛi* and the two aksharas at the end. The legend on example C is missing except the first two characters and the top of the *dhi*, and there is reason to suspect that the legend on D, as read above, lacks its final akshara, which seems to have been lost underneath an infolding of the edge of the clay. There is no precise duplicate, but Seal No. 580-A appears to be the signet of the same individual, with the same legend; but the lion is slightly larger in the latter.

No. 574. (Plate XLIX). A high, conical matrix, of clay, rectangular in plan measuring 1″×$\frac{7}{8}$″, found at S 25 b 2, 3 feet deep. For description see page 78.

No. 575. (Plate XLIX). The concave, cup-like impress of a small round seal $\frac{1}{2}$″ in diameter. It shows no device, but bears the legend *Bhavanasya, i.e.*, '(seal) of Bhavana.' Findspot, X 15 d 2, 2′ 6″ deep. (See page 70 above).

No. 579. (Plate XLIX). Impress of a large round seal, $\frac{3}{4}$″ in diameter, on a lump of black clay. The device is a very quaint bull standing to right, as roughly modelled from present appearances, as a terracotta toy. The legend is exceedingly faint and .... *raghras(ya)* is all that I can make out. The seal was found at A′ 42 d 2, 7′ 6″ deep, and there are no duplicates.

No. 580. (Plate XLIX). Another very heavy sealing of the same general class as No. 572 above. The present specimen was found at A′ 42 d 2, 7 feet 6 inches deep, and bears five seal impressions;

580-A on the left side of the sealing, is the same as 580 E, which occurs on the lower slope of the peaked top surface. Both have a strong family resemblance to No. 572 C, showing a heraldic lion, sejant, to left; but here the lion is somewhat larger. The legend is not very clear on either A or E, unfortunately, but it seems to be the same as the legend on 572 C discussed above.

580-B is the partial impress of a large rectangular seal, area indeterminate, showing the legs only of some human figure standing, facing, on a square platform. It is clearly not identical with 572 A and B, because here the seal is rectangular, and there is no trace of the shield or fire-altar motif. The legend is not legible to me.

580-C is on the lower half of the left hand side, and although only a partial impress, seems to have been made with a circular seal, subsequently overlapped and partly obliterated by 580 E. We see what is apparently the head and shoulders of a bull, reclining to left, but the legend, curiously enough, bears a resemblance to that on 580A.

580-D is the impress, badly broken, of a large oval seal, on which the device appears to have been a large seated lion, facing. The legend is too faint to be read at all.

580-E as was noted above, is the same as 580-A.

No. 588. (Plate XLIX). A round clay token, $\frac{5}{8}$″ in diameter, found at S 25 d 4, 3 feet deep. For description see above, page 78.

No. 589. Impression of a large oval seal, 1$\frac{1}{4}$″×$\frac{3}{4}$″, on a pointed oval lump of black clay found at A′ 43 b 4, 6′ 7″ deep. The device is a tall standing bull, facing, but the legend is so faint as to be quite illegible.

No. 590. (Plate XLIX). Impress of an ova seal, 1″×$\frac{3}{4}$″. The device is a most

curious figure of a seated animal, presumably a lion, facing. The legend occurs below, and reads *Bharggavasya*, *i.e.*, '(seal) of Bharggava.' Findspot, A′ 43 b 4, 6′ 7″ deep. There are no duplicates.

No. 600. The wholly illegible impress of a circular (or rectangular ?) seal without device, but which bore several lines of writing. The present diameter of the area is ⅝″. Findspot A′ 43 b 4, 6′ 7″ deep.

No. 601. Impress of a narrow oval seal, ⅞″×½″, found at A′ 43 b 4, 6′ 7″ deep. The device is the "shield symbol" which I have identified above (see No. 572-A) with the Persian fire-altar. It is noteworthy that in the present example the base of the symbol is plainer and less curved at the sides or points than before, which makes the resemblance to the incuse of the altar still more striking. The legend, unfortunately, is too faint to be read.

No. 603. (Plate XLIX). Oval area, 1⅛″×¾″. The device is a standing goddess or other female, facing, with drapery floating to right and left, but otherwise apparently nude. The left hand rests on the hip, the right is outstretched. For the reading of the legend I am indebted to Paṇḍit Bidyabinoda of the Indian Museum, Calcutta, who reads it as *(Srī)-purakshajabhasya*. But neither the Paṇḍit nor I can interpret this.

No. 604. (Plate XLIX). Another example of the *Hastadevasya* seal, found at A′ 43 b 4, 6′ 9″ deep; *cf.* No. 94.

No. 605. Oval area, 1⅛″×¾″. The device is some divine figure standing facing, with very large and prominent nimbus. The left hand rests on the hip, the right is outstretched, as in the *Varada-mudrā*. Drapery floats on either side from the level or line of the waist. The figure stands on a heavy square platform, below which no traces of any legend remain. Findspot A′ 42 d 2, 9′ 3″ deep.

No. 606. (Plate XLIX). Narrow oval area, ¾″×⅜″, found at A′ 43 b 4, 7′ 8″ deep. The device is a tall, but not very well modelled lion, seated to left. Below is the legend which reads, *Tanudāsasya*, *i.e.*, '(seal) of Tanudāsa,' according to Paṇḍit Bidyābinoda.

No. 607. (Plate XLIX). A magnificent seal with the Persian fire-altar and the legend *Bhagavata Ādityasya*, *i.e.*, '(seal of the temple) of the Blessed Sun.' For description see above, page 80. Findspot S 25 d 2, 3′ 7″ deep.

No. 610. This seal very much resembles No. 605, as it shows a standing figure, nimbate, in much the same posture. But here there are faint traces of a legend now illegible. Findspot A′ 43 b 4, 7′ 10″ deep.

No. 612. A high-backed pinch of clay with impressions of two signets:

612-A is a duplicate of No. 8 B (*Śreshṭhinigamasya*).

612-B is a duplicate of the *Kañkasya* seal, No. 193.

No. 620. (Plate XLIX). Area oval, 1⅛″×¾″. The device is very peculiar, and so faint as to be uncertain; it bears some resemblance to a sketchily drawn human figure, but there seem to be two arms (or horns ?) too many! The legend reads *Getasya*, *i.e.*, '(seal) of Geta.' Findspot A′ 43 b 4, 7′ 9″ deep.

No. 624. (Plate XLIX). A very fine, neat seal, circular in area, with a diameter of ¾″. The device is an unusually elegant urn or *kalaśa* holding a single small flower with sun and moon, or two crescents, above to right and left. The legend reads *Mahākaśikasya*, *i.e.*, '(seal) of Mahākaśika.' It was found at W 17 b 1, 2′ 8″ deep. See above, page 71.

No. 629. A sealing found at A′ 43 b 4, 8′ deep, with two seal impressions, duplicates of No. 193 and 8 B respectively.

No. 630. (Plate XLIX). Oval area $\frac{3}{4}'' \times \frac{5}{8}''$. The device is a very conventional or schematic form of the conch or *śankha* motif. The legend reads *Śrīchēṭasya, i.e.*, '(seal) of Śrī-Cheṭa.' Findspot A′ 43 b 4, 8′ deep. There are no duplicates of this seal, which is distinguished by considerable boldness.

No. 631. Sealing found at A′ 42 d 4, 10′ 3″ deep, bearing two impressions, duplicates of No. 8 A and 8 B respectively.

No. 632. From A′ 43 b 4, 8′ 3″ deep. Two impressions, one of the *Kaṅkasya* type (see No. 193) and the other of the *Śrēshṭhinigamasya* type (see No. 8 b).

No. 633. Another double sealing, like No. 631. Findspot A′ 42 d 4, 10′ 3″ deep.

No. 634. Identical with 633. Findspot also the same.

No. 635. Another specimen of the same type from the same findspot, also 10′ 3″ deep.

No. 648. A further example of the *Śrēshṭhinigamasya* seal No. 8 B, found at A′ 43 b 4, 9 feet deep. There is also part of another seal impression, seemingly another *Vishṇudāsa* like No. 8 A.

No. 649. (Plate XLIX). Area a small oval, but broken lengthwise so that only one half of the device is preserved. This is a strange form of seated lion, facing, reminding one somewhat of No. 590, but the present animal is smaller, and there are traces of a curious garland-like adjunct behind the head. No legend. Findspot A′ 43 b 4, 9′ deep.

No. 650. (Plate XLIX). Oval area, $\frac{3}{4}'' \times \frac{5}{8}''$. The device is a small and uncertain object, like a single standard. The legend, which is faint, reads *Kumārasya, i.e.*, '(seal) of Kumāra' or 'of the prince,' if Kumāra here is not a proper name. Findspot A′ 42 d 4, 11′ deep.

No. 651. (Plate L). A sealing discussed at some length above, p. 66. Findspot A′ 9 d 3, 2′ 10″ deep. It has unfortunately been shown in the plate as lying on its side.

No. 668. (Plate L). Broad oval area, $1'' \times \frac{3}{4}''$. The device is a neatly drawn naturalistic conch or *śankha*, above two lines which run lengthwise of the seal and divide it into two nearly equal parts. The legend occurs in the lower field, and is in large, thin, fancy aksharas which I cannot make out. They look something like *Paśubarusya*, but this is almost certainly incorrect as a reading. The seal was found at C′ 46 a 3, 6′ deep. It is in fairly good condition, and the legend ought to be legible.

No. 669. Another of the *Nāgaśarmmasya* seals, like No. 55, found at A′ 43 d 2, 11′ deep.

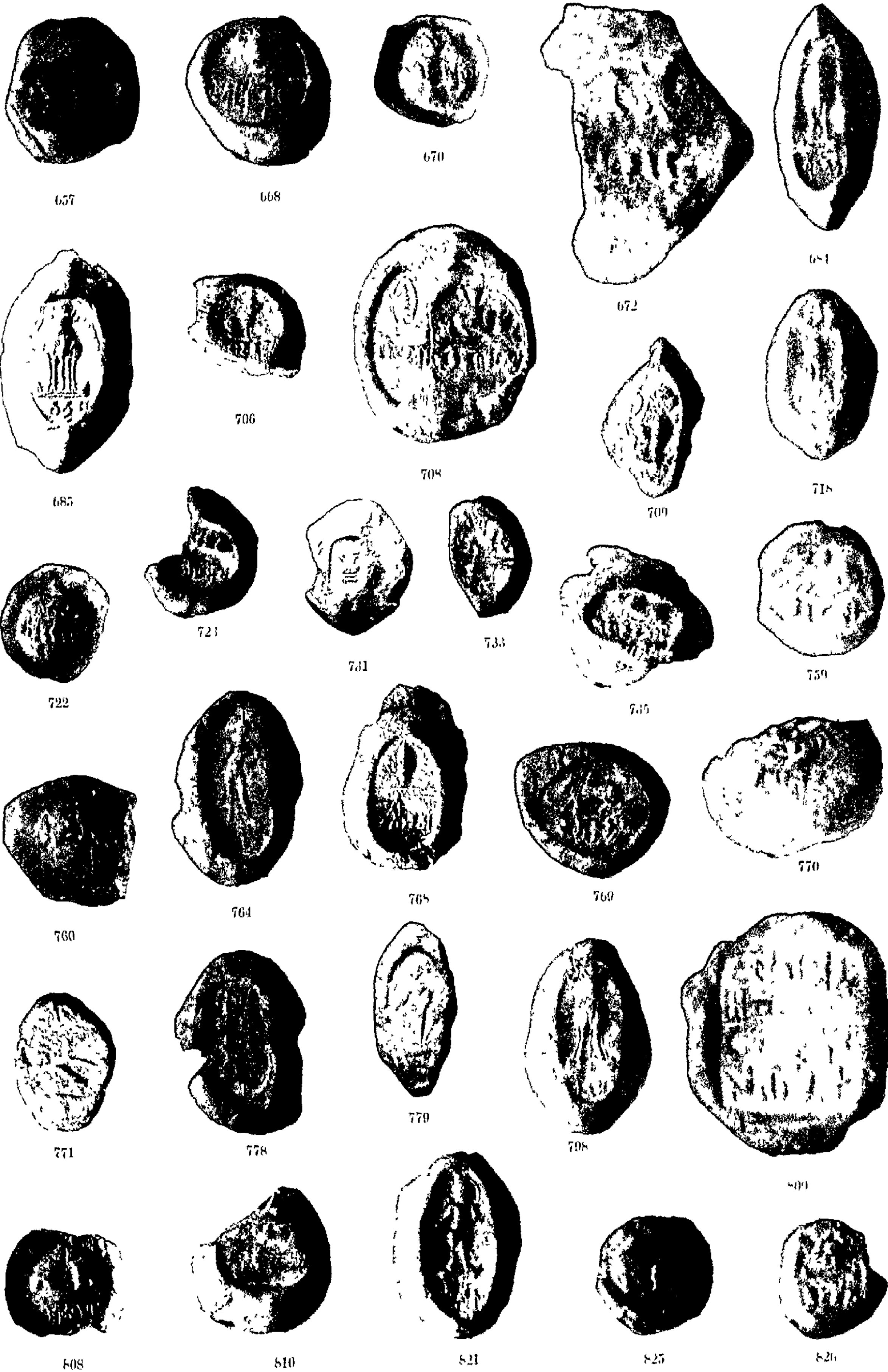
No. 670. (Plate L). Oval area, $\frac{3}{4}'' \times \frac{5}{8}''$. Device, a very open, schematic sort of *śankha*, with no horizontal line below. The legend reads *Nāgava(r)shasya, i.e.*, '(seal) of Nāgavarsha,' but the third and fourth aksharas are somewhat uncertain. Findspot, A′ 43 d 2, 11′ deep.

No. 671. A signet or seal-matrix, from W 17 c 1, 3′ deep ; *cf.* page 71.

No. 672. (Plate L). Either a fragmentary sealing, or a seal impression on a piece of pottery. Findspot S 25 a 4, 5′ 4″ deep ; *cf.* page 81 above.

No. 684. (Plate L). Long, narrow oval area, $1\frac{1}{4}'' \times \frac{1}{2}''$. The device is a standing bull, facing, which seems to have the Sassanian sphere between its horns,

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657 668 670 672 684 685 706 708 709 718 722 723 731 733 735 759 760 764 768 769 770 771 778 779 798 800 808 810 821 825 826

but one cannot, perhaps, be sure of it. The animal stands on a heavy platform or base. The legend I would read as *Dhruvanasya, i.e.*, '(seal) of Dhruvana,' the first akshara being the only one about which there is doubt. The whole is a rather fine seal, of which we recovered no duplicates. Findspot, A' 42 d 4, 6' deep.

No. 685. (Plate L). A magnificent sealing from A' 42 d 4, 6' 3" deep. The device is an exceptionally well drawn bull, facing, with so prominent a dewlap that at first the animal seems to have five legs. The impress of the legend is perfect, and reads *Nandaḥ*, a proper name in the nominative. Most of our seals end in a genitive and apparently only these two forms were permitted, if we except such formulæ as "*Namas tasmai.*"

No. 703. A signet of grey stone with decorated sides, showing as device a *kalaśa* with foliage, but no legend. Found at S 25 a 4, 5' 10" deep; see page 81 above.

No. 706. (Plate L). A sealing reading *Nāgadakkasya*, from S 25 a 4, 6' deep, which is a duplicate of No. 713, found in immediate association with it. Compare page 81 above.

No. 708. (Plate L). A very fine sealing, with two seal impressions, one of *Varāhadattaḥ* and the other of *Kulika-Dhaṇasya*, from Z 11 a 3, 4' 10" deep. Compare above, page 67, and also A. S. R. for 1903-04, p. 114, No. 73. Dr. Bloch found nine specimens of the Kulika-Dhaṇasya seal, combined with the seal of Bhavasēna.

No. 709. (Plate L). Narrow, oval area, 1"×½". Device a large lion, seated, to right. No legend. Findspot A' 42 d 4, 10' deep.

No. 710. Duplicate of No. 73, from A' 42 d 4, 10' 6" deep.

No. 711. From A' 43 b 2, 11' deep. An oval area, ⅝"×½" showing as device a humped bull standing to right (?). There is no legend, and there are no duplicates.

No. 713. Duplicate of No. 706, also from S 23 a 4, 6' deep.

No. 716. A small, round, clay token, from W 17 a 1, 4' deep. In the upper part of the area a *śankha* is visible, and a *swastika* below, but the legend in between these emblems is obscure; it appears to read *Ki* ... *jika(sya)*.

No. 718. (Plate L). Duplicate of No. 55, from A' 42 d 4, 11' deep.

No. 719. Apparently a duplicate of No. 94, found at A' 42 d 4, 11' deep.

No. 722. (Plate L). Oval area, ¾"×⅝". Exceptional, in that the device a small, naturalistic *śankha*, occurs below the legend. The latter is in very bold raised aksharas, and reads *(Śrī)-Dhanadakasya, i.e.*, '(seal) of Śrī-Dhanadaka.' The letter *da* is doubtful. Findspot, C' 44 a 3, only one foot deep. (Upside down in the plate).

No. 723. (Plate L). A broken sealing, the break entailing the loss of the head of the reclining animal, perhaps a bull to left, which forms the device (but there is no sign of any hump). The area measures ¾"×⅝", and is an oval. The legend is in exceptionally neat square aksharas, and reads, curiously enough, *Achalipastisya* which one would suppose ought to mean '(seal) of Achalipasti,' but this does not appear to be a possible Hindu name. It would be interesting if this legend could find explanation. I cannot see that the reading is at all doubtful. Findspot C' 45 a 1, only one foot deep.

No. 730. A sealing altogether indistinct, from C' 44 a 4, 1' deep.

No. 731. (Plate L). A medium sized lump of clay with the impression of a single small rectangular seal whose area measures $\frac{1}{2}'' \times \frac{3}{8}''$. There is no legend, unfortunately, but the device is an unusually neat figure of the so-called "shield-motif," which I would interpret as a symbol for the fire-altar (*cf.* description of Seal No. 572 A). There are two short horizontal lines as base for the figure, which is noteworthy as showing less curvature at the four outward corners than the example discussed before, so that the present specimen resembles in shape the outline of the incuse around the fire-altar on the Pāṭaliputra potsherds even more than No. 572. Findspot C′ 43 c 1, 6′ deep.

No. 732. Duplicate of No. 94, found at C′ 43 c 4, 8′ deep.

No. 733. (Plate L). The incomplete and faint impress of a small, oval seal, the device on which is too faint to be recognizable. Below it are two bold horizontal lines, below which comes the legend, *Buddhamitra(sya)*, *i.e.*, '(seal) of Buddhamitra.' Findspot C′ 44 a 1, 1′ 3″ deep. (Also upside down on the Plate).

No. 752. A heavy, black sealing, with the impress of an oval seal, area $1'' \times \frac{1}{2}''$. There is no legend. The device is a large lion, seated, facing. Findspot, A′ 43 d 2, 3′ deep.

No. 753. (Plate L). A long, narrow area, oval, $\frac{7}{8}'' \times \frac{3}{8}''$. The device runs lengthwise of the seal, and is a humped bull, reclining to left. The legend occurs in six aksharas below, but only the final *sya* at the extreme right is legible. Findspot C′ 43 c 2, 2′ 6″ deep.

No. 759. (Plate L). A really fine seal, with oval area $1'' \times \frac{3}{4}''$. The device is a finely modelled humped bull, reclining in life-like fashion to left, with no base line below. The legend is in three boldly raised aksharas, reading *Buṭasya*, *i.e.*, '(seal) of Buṭa.' Both legend and device are in unusually high relief. Findspot, A′ 43 d 2, 3′ 6″ deep.

No. 760. (Plate L). A curious, heavy but hollow piece of clay, more like a token of some sort than a sealing, with the broken impress of an oval seal. The only device is a small swastika above. The legend, which is in large, bold characters, reads *Vajikasya*, *i.e.*, '(seal) of Vajika.' It was found at the edge of the moat, having been lost there either by the previous explorers or by ourselves.

No. 764. (Plate L). A fine seal, long narrow oval area, $1\frac{1}{4}'' \times \frac{5}{8}''$. The device is a tall female figure standing facing, with the upper part of the body bent considerably to the (proper) left. Left hand on hip ; right extended toward the right as in the *Varadamudrā*. The figure is seemingly nude, but there are draperies floating to left and right from the level of the waist, and some garland or drapery pendent in front, as though suspended from a girdle around the waist. There is no base line or other support for the figure to stand on, but the most curious feature of all, is the headdress which she wears, like a single high horn with streamer floating to the (proper) left. The legend is in extremely delicate and well cut aksharas, which one would suppose ought to be clearly legible. However, I am somewhat doubtful about the third. The first is gone ; the others I read : *tipurakshashashṭhidattah*, a legend I fail to comprehend. Findspot, A′ 43 d 3, 5′ deep.

No. 768. (Plate L). Impress of a wide oval seal, $1'' \times \frac{3}{4}''$. The device is an upright wheel with the edge or rim facing, and the axle projecting to either side.

Below is a decorated band like a ribbon crossing the field horizontally separating the device from the legend, which reads *D(e)vilasya, i.e.,* '(seal) of Devila.' Findspot A′ 42 d 4, 7′ deep.

No. 769. (Plate L). A seal impress where device and legend are in unusually high relief. The area is oval, 1″×¾″. The device is a humped bull reclining in naturalistic manner to the left, the folds of skin on the neck being carefully delineated. The legend occurs below without any dividing line between it and the device. It reads *Dāsakasya, i.e.,* '(seal) of Dāsaka.' Findspot A′ 42 d 4, 7′ deep. There are unfortunately no duplicates of this very good seal.

No. 770. (Plate L). Another fine bold seal, with only a boldly drawn schematic type of *śankha* for a device. The legend seems to be *Damabhad(r)aḥ*, but I am not sure but what the second akshara is really a *sa* instead, making the whole perhaps *Dāsabhadraḥ* if this is possible as a proper name. The area is not very clearly defined; it appears to have been an oval, and now measures 1⅝″×½″, but the upper edge is broken off, and it must originally have been wider. The seal was found at A′ 43 b 2, 7′ 6″ deep.

No. 771. (Plate L). A curious seal, without any signs of a legend, but showing a schematic *śankha* and two other strange and wholly uncertain objects as devices. Findspot A′ 42 d 4, 7′ deep.

No. 776. An illegible seal from S 25 a 4, 7′ 6″ deep.

No. 778. (Plate L). Duplicates of Nos. 193 and 8 B, from A′ 42 d 4, 7′ deep.

No. 779. (Plate L). A medium sized sealing, with impressions of two separate seals, both very faint. On the left hand side we see a tree growing from a large pyramidal base, no trace of any legend being now preserved. The area even is indeterminate. On the right side the impression is that of an oval seal, 1″×⅝″ where the device is a draped goddess facing, holding in her left hand the stalk of a very tall lotus which rises above her left shoulder. The legend is obliterated. Findspot A′ 42 d 4, 7′ 6″ deep.

No. 798. (Plate L). Oval area, 1⅛″×⅝″. The device is a very fine large bull standing on a heavy platform or base, facing, with a small sphere between the horns. The tail is prominent. The feet are spread curiously far apart. Above, to left, is a small crescent moon. The legend is not clear; perhaps it reads: *Krishṇasya*, but the aksharas are blurred. Findspot C′ 43 c 2, 4′ 6″ deep.

No. 800. (Plate L). The magnificent Mauryan seal found at W 17 c 2, 6′ 3″ deep, and discussed at length above, pages 71 ff.

No. 804. Further examples of the *Vishṇudāsa* and *Sreshṭhinigama* seal impressions (see Nos. 193 and 8 B) on a single sealing found at C′ 43 a 4, 5′ deep.

No. 808. (Plate L). A very good seal from S 25 b 2, 11′ deep; see above, page 82.

No. 810. (Plate L). Wide oval area, ⅞″×⅝″. Device a very diminutive bull reclining to left. The legend is faint. It seems to read *Karnidāsasya*, but the second, conjunct, letter is probably wrong.

No. 811. Duplicate of No. 8 A and (?) B, from A′ 44 b 2, 6′ 4″ deep.

Nos. 821, 823. (Plate L). Two identical seals, both from A′ 44 b 4, both 7′ 3″ deep. Area oval, 1¼″×⅝″. Device a tall, draped figure, nimbate. standing on pedestal, facing. Legend, *Bindinikaḥ*.

No. 825. (Plate L). Impress of an oval seal, area $\frac{3}{4}'' \times \frac{5}{8}''$, found at B′ 7 d 2, 7′ deep. On page 65 above, where I have discussed this seal, I find I have stated that the device is a humped bull reclining to left, whose head has failed of impression. This may be right; but on further examination of it, I am inclined to wonder whether perhaps the animal is not intended to have its head bent backwards so as to be concealed from the spectator by its own right shoulder. Such a suggestion appears improbable enough, I admit; but the extreme left-hand edge of our sealing is intact, and there is curiously enough no sign of any head ever having been impressed at this point, and the body of the bull is in such fine high relief that I do not understand how the head could have failed of impression, as I first put it, if it had ever been cut in the die. I believe, also, that there are exceedingly faint traces of a legend in extremely minute aksharas along the lower edge of the sealing, but they are far too faint to be made out now.

No. 826. (Plate L). A small oval impress, damaged on the upper edge. The whole field is edged by a single hairline as ornament. Device a Persian fire-altar (?) in schematic form. Legend, *Rudradēva*, the *Ru* being very uncertain. Findspot, A′ 44 b 4, 7′ deep.

* * * * * * * *

In all, 283 impressions on 235 sealings, including tokens, matrices, etc.

D. B. SPOONER.

UNCLASSIFIED FIELD REGISTER OF FINDS AT BASARH EXCAVATIONS. SEASON OF 1911-12.

Note.—The capital letter with its following numeral indicates the square of the general plan of the site as on any ordinary map. Each of these squares measures 16′ to a side. This is then to be mentally divided into four quarters, each measuring 8′ to a side, and lettered a, b, c and d, the order of the lettering being upper left, upper right, lower left, lower right. Each of these small squares is again divided into four squares in precisely the same way and numbered 1, 2, 3 and 4, in the same order as before. Thus for purposes of registration each of the main squares is subdivided into 16 smaller squares, of 4′ to a side, but the subdivisional lines are omitted to avoid overcrowding in the reduction of the plan required for publication. *Example, S 25 a^4 means the south-east quarter of the north-west quarter of the main square numbered S 25 on the plan.* As the depth at which each article occurred is also recorded, this system enables the reader to re-place each and every fragment recovered in the year under review in the exact spot where it was found within the area of the citadel measuring roughly 2,000 by 1,000 feet, with a possible error not exceeding 2′ and a fraction. Thus seal No. 706 is registered as having been found S 25 a^4, 6′ deep. From the published plan of square S 25, where is recorded the depth of each wall at its base, it will be seen that this seal was recovered close to the northern end of the short wall ZA′, which rises from the level where the seal occurred, *viz.*, 6′ below the surface.

No.	Class.	Description, Findspot, etc.
1	Brick . .	Measuring $11\frac{1}{2}'' \times 8\frac{3}{4}'' \times 2\frac{1}{4}''$, one long edge carved. N. B. At Shah-ji-ki-Dheri bricks $11\frac{1}{2}'' \times 8\frac{1}{2}'' \times 2''$ were found in what was seemingly an "early" structure; *cf* A. S. R. 1910-11, p. 28. *Found* B′ 44 a 3; 3′ deep.
2	Pottery .	Perforated lid, with rude figure of a peacock; measures $2\frac{1}{4}'' \times 2''$. *Found* B′ 44 a 1; 6′ deep.
3	Sculpture .	Red sandstone Buddha head, Gupta type; $4'' \times 2\frac{1}{2}''$. *Found* B′ 44 a 3; 5′ deep.

No.	Class.	Description, Findspot, etc.
4	Sculpture .	Red sandstone pedestal with two feet preserved; $2\frac{1}{2}'' \times 1\frac{1}{4}''$. *Found* B 44 a 3; 3′ deep.
5	Metal .	Spearhead (?), rusted; $8\frac{1}{2}'' \times 1\frac{1}{2}'' \times \frac{1}{2}''$. *Found* B′ 44 a 3; 3′ deep.
6	Pottery .	Pot, 7″ across top, largest diameter 9″, height 5″. *Found* B′ 44 a 3; 3′ deep.
7—10	Seals . .	See special List of seals.
11	Coin . .	A copper punchmarked coin. *Found* D′ 42 b 3: 8′ deep.
12	Metal . .	Long-handled ladle, broken; the handle now measures 1 foot long, the bowl, $3\frac{1}{2}'' \times 2\frac{1}{2}''$. *Found* D′ 42 b 4; 4′ deep.
13	Terracotta .	Figurine; cow's head with garlanded horns, the clay being moulded on stone core; 4″ long by $2\frac{3}{8}''$ across the ears. *Found* C′ 48 d 1; 5′ deep.
14	Seal . .	See special List of seals.
15	Bead . .	Bead of crystal, barrel-shaped, cut in facets, pierced lengthwise. *Found* B′ 44 d; depth unknown.
16	Pottery .	Two small fragments of a blue glazed ware. *Found* D′ 42 b 4; 3′ deep.
17	,, .	Spouted vessel as used by mendicants; four parallel lines around centre; diam. 8″. *Found* C′ 48 d; 4′ deep.
18	Mould . .	Earthenware, concave; the pattern is one of concentric circles around edge, regular lines in centre; diam. $3\frac{1}{2}''$ ht. $2\frac{3}{4}''$. *Found* B′ 42 b; 4′ deep.
19	Stone . .	Lid to a vessel, yellow, irregularly banded with dark blue; diam. $4\frac{1}{2}''$, depth 1″. *Found* C′ 48 d; 3′ deep.
20	Pottery .	Fragment of a glazed dish; upper surface shows pattern of radiating rays with checker border; colours, yellow ground, green and brown lines; underneath, plain. Light yellow, diam. $3\frac{1}{2}''$. *Found* B′ 48 d; 4′ deep.
21	,, .	Two jars, ht. $3\frac{1}{2}''$, diam. $2\frac{1}{2}''$. *Found* C′ 48 d 1; 6′ deep.
22	,, .	Jar, ht. $2\frac{1}{4}''$, diam. $2\frac{3}{4}''$, width across opening $1\frac{3}{4}''$. *Found* C′ 48 d; 4′ deep.
23	,, .	Cup, diam. 5″. *Found* C′ 48 d; 4′ deep.
24	,, .	Cup, diam. 4″. *Found* C′ 48 d; 4′ deep.
25	,, .	Cup, diam. 4″. *Found* C′ 48 d; 4′ deep.
26	,, .	Cup, diam. $4\frac{1}{2}''$. *Found* C′ 48 d; 4′ deep.
27	,, .	Large vessel, ht. 18″, diam. 14″, across opening 6″; sides decorated with parallel lines in groups. *Found* C′ 48 d; 5′ deep.
28	,, .	Jar; ht. 9″, diam 8″, across opening, 4″. *Found* D′ 42 b; 6′ deep.
29	,, .	Cup; diam. $6\frac{1}{2}''$. *Found* B′ 42 b; 3′ deep.

No.	Class.	Description, Findspot, etc.
30	Pottery .	Jar; ht. 2¼", diam. 2½", across opening 2". *Found* D' 42 b ; 5' deep.
31	" .	Cup, diam. 3". *Found* B' 42 b ; 4' deep.
32	" .	Cup, diam. 3½". *Found* C' 48 d ; 4' deep.
33	" .	Cup, diam. 4". *Found* B' 48 d ; 4' deep.
34	Terracotta	Torso of female figure ; ht. 3½", width 2¼". *Found* D' 43 b ; 2' deep.
35	Misc. . .	Pottery ball, hollow, ornamented ; diam. 1¼". *Found* B' 43 c ; 5' deep.
36	Seal . .	See special List of Seals.
37	Wheel . .	Diam. 4". *Found* B' 46 a 3 ; 7' deep.
38	Coin . .	Small Muhammadan copper coin in suspiciously good condition, produced by a coolie as ostensibly from the place B' 41 c 2, 5' deep.
39	Pottery .	Two fragments of coarse brown pottery, showing large admixture of mica flakes, surface decorated in high relief with drops of the same material dropped evidently on to the finished surface in a semi-liquid state, and allowed to run, forming a sort of "raindrop" pattern ; *Found* B' 43 c 4 ; 8' 3" deep.
40	" .	Fragment of precisely similar pottery, where the raised surface decoration is broader and seemingly made by pressing the finger at regular intervals, thus rubbing up a little ridge of the mica-laden clay. *Found* B' 43 c 4 ; 3' 8" deep.
41	" .	Potsherd, fine texture, light colour, showing two parallel bands in high relief applied to the surface after turning, and moulded into an irregular wavy pattern. *Found* B' 43 c 4 ; 8' 3" deep.
42	Bead . .	Large, of cloudy, opaque grey, cut in facets and polished. *Found* B' 42 a 3 ; 7' deep.
43	Brick . .	Deeply, but coarsely carved ; fragment only. *Found* B' 41 d 2 ; 6' 6" deep.
44	Misc. . .	Small disc of smooth red stone, diam. 1", thickness ½". *Found* B' 42 a 3 ; 6' deep.
45	Pottery .	Four earthen cups. *Found* B' 41 d 2 ; 6' 6" deep.
46	" .	Two fragments like No. 39, seemingly the bottom of the same vessel. *Found* B' 43 c 4 ; 9' deep.
47	" .	Jar, ht. 8½", diam. 6½", across opening 3½". *Found* B' 43 c 4 ; 10' deep.
48	" .	Jar, fabric coarse, mixed with mica : decorated with vertical parallel lines ; ht. 10", diam. 7", opening 3½". *Found* B' 41 d 2 ; 11' deep.
49	" .	Bowl, ht. 3", base 2½", top 7". *Found* B' 43 c 4 ; 9' 6" deep.
50	" .	Two shallow cups.

No.	Class.	Description, Findspot, etc.
51	Pottery .	Fifteen cups, diam. 3½″. *Found* B′ 43 c 4 ; 9′ 6″ deep.
52	" .	Fragment with one heavy scalloped band of ornament. *Found* B′ 43 c 4 ; 10′ deep.
53	Seal . .	See special List of Seals.
54	" . .	" " " " "
55	" . .	" " " " "
56	Pottery .	Three cups. *Found* C′ 48 a 1 ; 6′ deep.
57	" .	Five cups. *Found* B′ 43 a 3 ; 3″ deep
58	" .	Jar, ht. 3″. *Found* B′ 43 d 1, 6′ 3″ deep.
59	" .	Four cups. *Found* B′ 43 d 1 ; 6′ 6″ deep.
60	" .	Three fragments of fine grey ware, one with a black slip very highly polished, and two with a metallic grey slip or glaze, shiny. *Found* B′ 43 a 2 ; 7′ deep.
61-77	Seals . .	See special List of Seals.
	Wheel . .	3¾″ diameter. *Found* B′ 43 c 3 ; 15′ deep.
	Pottery .	Black, closed, circular jar with sloping sides and narrow circular opening at top, like a modern hookah base ; ht. 4¼″, diam. 5″, opening 1″. *Found* B′ 42 b 1 ; 6′ 7″ deep.
80	Terracotta .	Figurine, small, female, defaced ; ht. 2¼″, width ¾″. *Found* C′ 48 a 2 ; 6′ 7″ deep.
81-86	Seals . .	See special List of Seals.
87	Terracotta .	Head, with elaborate headdress and halo ; measures 3½″×3½″ ; *cf.* No. 124. *Found* B′ 42 c 2 ; 6′ 6″ deep.
88	" .	Curious, hollow, double or two-faced figure, with circular opening as for a stick. The one figurine represents the torso of two figures, with two faces, and with two pairs of arms and hands on opposite sides, the hands in both cases being held in front of the breast ; ht. 2¾″. *Found* B′ 43 c 3 ; 15′ deep.
89	" .	Arm and hand of figurine, with bracelet ; length 2¾″. *Found* B′ 43 c 3 ; 15′ deep.
90	" .	Head with high pointed headdress ; ht. 1¾″. *Found* E′ 42 d 1 ; 6′ 3″ deep.
91	Misc. . .	Oval, flat, bone ornament, with pierced projections right and left. *Found* B′ 47 a 1 ; 8′ deep.
92	Pottery .	Circular fragment of black glazed ware, 1½″ diam. *Found* B′ 48 a 4 ; 10′ 6″ deep.
93-94	Seals . .	See special List of Seals.

No.	Class.	Description, Findspot, etc.
95	Misc. . .	Fan-shaped ornament of black earthen-ware; handle pierced ht. $\frac{3}{4}$", width 1"; design and execution both good. *Found* B' 42 a 4; 7' deep.
96	Wheel . .	$3\frac{1}{2}$" diameter. *Found* B' 43 c 2; 15' 6" deep.
97	Seal . .	See special List of Seals.
98	Pottery .	Seventeen cups. *Found* B' 41 c 2; 11' deep.
99	" .	Five large cups. *Found* B' 41 c 2; 11' deep.
100	" .	Five cups. *Found* E' 42 d 1; 6' 6" deep.
101	" .	Lid of light, fine, black ware; around the central knob or handle is a broad band, below which is a series of leaves. *Found* B' 48 a 4; 10' deep.
102	" .	Bowl, ht. $3\frac{3}{4}$", diam. $4\frac{3}{4}$". *Found* E' 41 c 2; 9' deep.
103	Seals . .	See special List of Seals.
104	Pottery .	Jar, ht. $8\frac{1}{2}$", diam. 7", opening $3\frac{1}{2}$". *Found* B' 41 c 2; 11' deep.
105	" .	Three cups, diam. $5\frac{1}{2}$". *Found* B' 41 c 2; 11' 6" deep.
106	" .	Twenty-one cups, diam. 4". *Found* B' 41 c 2; 12' deep.
107	" .	Three cups. *Found* B' 43 d 2; 9' deep.
108	" .	Fragment with band of moulded decoration. *Found* B' 43 d 2; 9' deep.
109	" .	Jar, ht. 8", diam. 7", opening $3\frac{1}{2}$". *Found* B' 41 c 2; 12' 3" deep.
110	" .	Jar, ht. $9\frac{1}{2}$", diam. $7\frac{1}{2}$", opening $3\frac{1}{2}$". *Found* B' 41 c 2; 12' 3" deep.
111	" .	Fragment of glazed ware; colours yellow, brown, white and blue. *Found* B' 46 c 3; 9' deep.
112	Terracotta .	Head with high pointed headdress; ht. $1\frac{3}{4}$". *Found* B' 46 c 3; 9' deep.
113	Pottery .	Spout, ornamented; $3\frac{3}{4}$" long. *Found* B' 46 c 3; 9' deep.
114-116	Seals . .	See special List of Seals.
117	Coin . .	Copper, Muhammadan. *Found* B' 46 c 3; 9' deep.
118	Misc. . .	One small wire ring. *Found* B' 41 c 2; 11' deep.
119	" . .	Metal bangle. *Found* B' 41 c 2; 11' deep.
120	Seal . .	See special List of Seals.
121	Bead . .	Banded agate, grey, barrel shaped. *Found* B' 46 c 3; 9' deep.
122	" . .	Grey with a red blotch, round. *Found* B' 48 a 4; 9' deep.

No.	Class.	Description, Findspot, etc.
123	Terracotta .	Figurine, rude male, head and feet missing; ht. 3¼″, width 2¼″. *Found* C′ 48 a 3; 7′ 6″ deep.
124	,, .	Fragment with breasts and arms, completing No. 87; the left hand holds a lotus over the shoulder; ht. 2¾″, width 4¾″. Gupta type. *Found* B 42 c 2; 7′ deep.
125	Pottery .	Two cups. *Found* B′ 41 c 2; 12′ deep.
126	,, .	Eleven cups, diam. c. 4½″. *Found* B′ 41 c 2; 12′ deep.
127	,, .	Two cups. *Found* B′ 41 c 2; 12′ deep.
128	,, .	Five cups. *Found* B′ 44 a 4; 4′ 6″ deep.
129	,, .	Three minute fragments of semi-porcelain, with green crackled glaze. *Found* B′ 43 c 3; 12′ deep.
130	Beads . .	Two; A. a translucent, blue, cube, corners cut off. B. a translucent, red, three-sided pyramid. *Found* C′ 44 c 4; 9′ 6″ deep.
131	Terracotta .	Head of a dog (?) with long nose; forehead decorated with circles, each circle quartered and each quarter dotted. *Found* B′ 44 b 1; 4′ 6″ deep.
132	Wheel . .	Diameter 4″. *Found* B′ 42 c 2; 7′ deep.
133	*Terracotta* .	*Grotesque head, hollow, ht. 3½″, width 3″. Found* B′ 41 *c 2; 14′ deep.*
134	,, .	Neck and shoulders of figurine, with necklace. *Found* B′ 42 c 3; 7′ deep.
135	Pottery .	Nine cups, diam. c. 4½″. *Found* B′ 41 c 2; 13′ 9″ deep.
136	,, .	Drinking cup, ht. 3½″, across top 3¼″. *Found* B′ 41 c 4; 5′ deep.
137	,, .	Fragment with elaborate design in curves and bands in high sharp relief. *Found* B′ 42 b 2; 6′ 7″ deep.
138	,, .	Three cups. *Found* B′ 41 c 2; 14′ 3″ deep.
139	Misc. . .	Short fragment of a terracotta rod or cylinder fractured lengthwise; surface covered with vertical parallel lines of deeply incised wedges; perhaps used for grinding spices; length 2″; diameter 2¼″. *Found* B′ 48 a 4; 9′ 6″ deep.
140	Pottery .	Fragment of coarse ware with glaze showing dark brown, dark blue and dirty white *Found* B′ 43 c 3; 12′ deep.
141	,, .	Fragment of very fine grey ware with shiny black slip. *Found* B′ 43 c 3; 12′ deep.
142	Seal . .	See special List of Seals.
143	Terracotta .	Small head, crude: 2″×1¾″. *Found* B′ 41 d 2; 8′ 3″ deep.
144	Gold . .	Earring of gold wire. *Found* B′ 48 b 4; 10′ 8″ deep.

No.	Class.	Description, Findspot, etc.
145	Wheel . .	Diameter 3″. *Found* B′ 43 c 3 ; 15′ deep.
146	Terracotta .	Fragment of figurine showing one (right) arm and hand holding against the body an earthen vessel (?) ; measures 4¾″×4″. *Found* B′ 41 c 2 ; 5′ 6″ deep.
148	Pottery .	Two small three-cornered lamps. *Found* B′ 41 c 2 ; 5′ 6″ deep.
149	,, .	Two cups, shallow. *Found* B′ 41 c 2 ; 5′ 6″ deep.
150	,, .	Spout in form of makara's head, 2½″ long. *Found* B′ 42 a 4 ; 6′ 3″ deep.
151	,, .	Jar, ht. 3¼″, diam. 4¼″, opening 1¾″. *Found* B′ 42 a 4 ; 6′ 3″ deep.
152	,, .	Eaves-spout, broken ; length of fragment 6¼″, diam, 4½″. *Found* B′ 41 c 2 ; 15′ 9″ deep.
153	Misc. . .	Fragment of a brightly coloured glass bangle. *Found* B′ 48 b 4 ; 11′ deep.
154	,, . .	Large earthen dice, ¾″ long. *Found* B′ 42 c 2 ; 7′ deep.
155	Pottery .	Jar with small spout ; ht. 10″, diam. 11″, opening 3½″. *Found* B′ 42 b 2 ; 6′ deep.
156	Bead . .	Bead of banded agate, large white. *Found* B′ 42 c 2 ; 7′ deep.
157	Beads . .	Three beads ; A. green glass, small, barrel-shaped. B. yellow glass with dotted bands, round. C. brown stone, long, cylindrical. *Found* B′ 43 c 3 ; 6′ deep.
158	Misc. . .	Potter's dabber, ht. 2¾″, across base 3″. *Found* B′ 43 d 4 ; 8′ 6″ deep.
159	Seal . .	See special List of Seals.
160	,, . .	,, ,, ,, ,, ,,
161	Misc. . .	Small metal bangle. *Found* B′ 42 a 2 ; 2′ deep.
162-168	Seals . .	See special List of Seals.
169	Pottery .	Three cups, diam. 5¼″. *Found* B′ 41 c 2 ; 6′ deep.
170	Terracotta .	Fragment of figurine, seemingly winged ; 2″×2¼″. *Found* C′ 48 c 1 ; 12′ 6″ deep.
171	Wheel .	Diam. 3″. *Found* C′ 48 d 4 ; 12′ 6″ deep.
172	Terracotta .	Rude head ; ht. 2¾″. *Found* A′ 45 b 4 ; 9′ 6″ deep.
173	Pottery .	Shallow dish ; ht. 3¼″, diam. 8¼″. *Found* C′ 47 a 2 ; 2′ 6″ deep.
174	Seal . .	See special List of Seals.
175	Terracotta .	Grotesque head with high headdress ; ht. 3½″. *Found* A′ 45 b 3 ; 10′ 6″ deep.

No.	Class.	Description, Findspot, etc.
176	Terracotta .	Figure of a child ; ht. 2½". *Found* B' 42 a 4 ; 7' 6" deep.
177-178	Seals . .	See special List of Seals.
179	Pottery .	Jar, ht. 4½", diam. 4½", opening 4". *Found* B' 42 b 4 ; 7' deep.
180	„ .	Jar, round, with high narrow neck, ornamented with incised pattern ; ht. 2½", diam. 3½", opening ¾". *Found* B' 42 a 2 ; 5' deep.
181	„ .	Bowl ; ht. 3½", diam. 4½", opening 4½". *Found* B' 42 a 2 ; 5' deep.
182	„ .	Jar, ht. 2½", diam. 3", opening 1½". *Found* B'8 42 a 2 ; 5' deep.
183	„ .	Lid, with convex surface and wide rim ; across opening measures 6½". *Found* B' 42 a 2 ; 5' deep.
184	„ .	Two cups, diam. 6½". *Found* B' 41 c 2 ; 8' deep.
185	„ .	Bell shaped fragment, ht. 3¾". *Found* B' 41 c 2 ; 8' deep.
186	Misc. . .	Fragment of terracotta cylinder 5" long resembling No. 139. *Found* C' 47 a 2 ; 3' deep.
187	„ . .	Fragment of a hollow earthenware cylinder, 4" long, 3¼" in diam. *Found* B' 41 d 2 ; 8' deep.
188	Seal . .	See special List of Seals.
189	Terracotta .	Head and shoulders of a ram (?) pierced in 3 places to take wheels. *Found* B' 41 d 2 ; 8' deep.
190	„ .	Torso of a female figure ; ht. 3¼". *Found* B' 43 d 2 ; 8' 3" deep.
191-194	Seals . .	See special List of Seals.
195	Bead . .	Bead of crystal, barrel-shaped pierced lengthwise ; 1½" long, ¾" thick. *Found* B' 48 a 4 ; 13' deep.
196	Seal . .	See special List of Seals.
197	„ . .	„ „ „ „ „
198	„ . .	„ „ „ „ „
199	Misc. . .	Earthenware cylinder. 6½" long, 2" in diameter, with wedge shaped incisions, *cf.* No. 139. *Found* B' 42 c 1 ; 11' deep.
200	Seal . .	See special List of Seals.
201	„ . .	„ „ „ „ „
202	Pottery .	Cup, with incurving lip ; ht. 2", diam. 3¾", opening 2¼". *Found* B' 42 c 1 ; 11' deep.
203	„ .	Jar, ht. 8", diam. 8½", opening 4¾". *Found* C' 42 c 3 ; 7' 6" deep.

No.	Class.	Description, Findspot, etc.
204	Pottery .	Jar, ht. 3½″, diam. 3½″, opening 1¾″. *Found* B′ 42 c 1 ; 11′ deep.
205	" .	Jar, ht. 2¾″, diam. 2½″, opening 1½″. *Found* C′ 47 a 2 ; 4′ 6″ deep.
206	Misc. . .	Potter's dabber, ht. 4″. *Found* C′ 47 a 2 ; 4′ 6″ deep.
207	Pottery .	Two potsherds, decorated in high relief. *Found* B′ 43 d 2 ; 9′ 4″ deep.
208-212	Seals . .	See special List of Seals.
213	Pottery .	Bowl ; ht. 4″, diam. 7½″. *Found* B′ 46 d 4 ; 3′ 9″ deep.
214	" . .	Two cups. *Found* B′ 43 d 2 ; 9′ deep.
215	" . .	Eight cups. *Found* C′ 42 c 3 ; 8′ deep.
216	Seal . .	See special List of Seals.
217	Terracotta .	Fragment of figurine ; hands, body and legs only ; ht. 3¼″, width 2½″. *Found* C′ 46 b 1 ; 2′ 10″ deep.
218	Seal matrix .	See special List of Seals.
219	Seal . .	See special List of Seals.
220	Pottery .	Six cups, diam. 4″. *Found* B′ 43 b 2 ; 6″ deep.
221-223	Seals . .	See special List of Seals.
224	Misc. .	Stone fragment with radiating rays, diam. 1¾″. *Found* B′ 44 a 4 ; 13′ deep.
225	" . .	Ornamented mica slab, broken, 5½″×3¼″. *Found* B′ 43 c 1 ; 7′ 6″ deep.
226-228	Seals . .	See special List of Seals.
229	Terracotta .	Fragment ; head, shoulders and breasts of a female ; 3¼″×2¼″. *Found* C′ 46 b 1 ; 3′ 6″ deep.
230	Pottery .	Bowl ; ht. 2¼″, diam. 4″. *Found* B′ 44 d 4 ; 13′ 4″ deep.
231-232	Seals . .	See special List of Seals.
233	Pottery .	Jar ; ht. 2¾″, diam. 2¾″, opening 1½″. *Found* C′ 47 a 1 ; 4′ deep.
234	" .	Jar ; ht. 2½″, diam. 2½″, opening 1¼″. *Found* B′ 47 d 1 ; 4′ deep.
235	" .	Jar ; ht. 4¼″, diam. 2¼″, opening 1¼″. *Found* B′ 48 d 1 ; 4′ 3″ deep.
236	" .	Fragment with perforations ; ht. 2″, diam. 4″. *Found* C′ 47 a 1 ; 4′ 3″ deep.
237	Terracotta .	Head broken. *Found* B′ 43 d 4 ; 11′ 6″ deep.
238	Pottery .	Four cups. *Found* B′ 43 d 4 ; 11′ 6″ deep.
239	Seal . .	See special List of Seals.

No.	Class.	Description, Findspot, etc.
240	Pottery .	Jar ; ht. 4¼″, diam. 3½″, opening 1¼″. *Found* B′ 47 b 2 ; 4′ 6″ deep.
241	,, . .	Jar ; ht. 3″, diam. 2¼″, opening 1¼″. *Found* C′ 45 a 4 ; 4′ 3″ deep.
242	,, .	Two hollow convex covers ; ht. 2¾″, diam. 5″, opening 1½″. B′ 46 b 2 ; 4′ 6″ deep.
243	Mould .	Terracotta pattern-mould, circular face, 3″ diam. *Found* C′ 45 a 4 ; 4′ 3″ deep.
244	Pottery .	Fourteen cups. *Found* B′ 47 b 4 ; 4′ 6″ deep.
245	Terracotta .	Head high headdress, grotesque ; ht. 3″, width 2″. *Found* B′ 46 b 2 ; 4′ 6″ deep.
246	Gold . .	Minute fragment of thin gold leaf. *Found* B′ 43 d 2 ; 12′ 6″ deep.
247-249	Seals . .	See special List of Seals.
250	Misc. . .	Copper vase, broken at the top ; ht. 5″, diam. 2½″, opening ⅜″. *Found* C′ 42 c 2 ; 6′ deep.
251	Seal . .	See special List of Seals.
252	Terracotta .	Fat, squatting, male figure ; ht. 3¼″, width 1¾″. *Found* B′ 48 c 1 ; 4′ deep.
253	Misc. . .	Three large spindle whorls. *Found* A′ 40 d 4 ; 6′ 6″ deep.
254	Pottery .	Cup ; ht. 1¾″, diam. 3¼″. *Found* B′ 48 c 1 ; 4′ 6″ deep.
255	,, . .	Cup ; ht. 1″, diam. 2″. *Found* C′ 42 c 2 ; 6′ 3″ deep.
256	,, . .	Six cups ; diam. 4½″. *Found* B′ 48 c 1 ; 4′ 6″ deep.
257	,, .	Cover ; diam. 3″. *Found* A′ 40 d 4 ; 6′ 6″ deep.
258	,, .	Four cups, ht. 3¾″, diam. 5″. *Found* A′ 40 d 4 ; 7′ deep.
259	,, .	Jar (Sorai) ; ht. 7″, diam. 5″, opening 1¼″. *Found* B′ 44 a 4 ; 13′ 6″ deep.
260	Terracotta .	Small head with headdress in Bharhut style. *Found* B′ 43 d 2 ; 12′ 6″ deep.
261-264	Seals . .	See special List of Seals.
265	Terracotta .	A fish on a pedestal, broken ; 2″ high, 2¼″ long. *Found* B′ 43 d 2 ; 13′ deep.
266	Seal . .	See special List of Seals.
267	Pottery .	Eleven cups, average diam. 4″. *Found* B′ 40 d ; 7′ deep.
268	,, .	Eight cups, average diam. 4″. *Found* B′ 48 c ; 4′ 6″ deep.
269	,, .	Jar : ht. 2″, diam. 3″, opening 2″. *Found* B′ 40 b 3 ; 7′ 3″ deep.
270-279	Seals . .	See special List of Seals.

No.	Class.	Description, Findspot, etc.
280A	Bead . .	Bead of crystal, barrel-shaped, pierced lengthwise; measures 1¼″ × ¾″. *Found* B′ 44 a 4; 14′ 6″ deep.
280B	„ . .	Bead of white stone barrel-shaped, pierced lengthwise; measures ¾″ × ½″. *Found* C′ 42 a 2; 8′ deep.
281-282	Seals . .	See special List of Seals.
283	Terracotta .	Fragment showing legs and left hand of a standing figure; 2¼″ × 1¼″. *Found* B′ 48 a 4; 6′ 6″ deep.
284	„ . .	Fragment, torso of female figure; 2¾″ × 3″. *Found* C′ 42 a 4; 4′ 8″ deep.
285	Wheel . .	Broken. *Found* B′ 43 d 2; 14′ 6″ deep.
286	Seal . .	See special List of Seals.
287	Coin . .	A silver punchmarked coin, roughly circular. *Found* C′ 45 c 4; 4′ 6″ deep.
288-289	Seals . .	See special List of Seals.
290	Terracotta .	Toy animal, 4¼″ × 2½″. *Found* C′ 42 a 4; 6′ 6″ deep.
291	Bead . .	Bead of carnelian, pierced through the sides. *Found* B′ 44 d 4; 12′ 9″ deep.
292	Pottery .	Broken finial, now 5″ in ht. *Found* B′ 40 b 2; 7′ 9″ deep.
293	„ .	Two spouts, A. 4½″ long; B. 4″ long. *Found* B′ 40 b 1; 8′ deep.
294	„ . .	Two covers 4″ in diam. convex. *Found* C′ 45 c 4; 4′ 6″ deep.
295	„ . .	Dish; ht. 2½″, diam. 9¾″. *Found* B′ 40 b 2; 7′ 9″ deep.
296	Seal . .	See special List of Seals.
297	Misc. . .	Metal utensil, paddle shaped, with long handle now broken; measures 6¼″ long over all; blade 3″ long by 2¼″ wide. *Found* B′ 44 a 3; 13′ deep.
298	Seal . .	See special List of Seals.
299	Misc. . .	Fragment of almost mauve coloured slate, showing curving band of seven leaves; 3½″ long. *Found* B′ 41 c 4; 11′ deep.
300	„ . .	Knobbed handle of some metal implement, 3½″ long. *Found* B′ 24 d 4; 13′ deep.
301	Pottery .	Pot, with short spout and high, outward-curving edge and rounded base; ht. 6″, diam. 6¼″. *Found* B′ 47 b 2; 7′ 9″ deep.
302	Misc. . .	Long metal needle, with one end thickened before the point; perhaps a stylus. *Found* B′ 44 a 4; 17′ deep.
303	Seal . .	See special List of Seals.

No.	Class.	Description, Findspot, etc.
304	Bricks .	Two heavy curved bricks with advanced edges at top and bottom on the convex side, such as are used for lining wells, etc. *Found* B' 42 c 2 ; 17' 3" deep.
305	Misc. . .	Heavy, fanshaped, pottery implement, with round handle and toothed edge ; 3" long, 2¾" wide across greatest width. *Found* B' 41 b 2 ; 7' 9" deep.
306	Bead . .	Round, white. *Found* B' 44 d 4 ; 14' 6" deep.
307	„ . .	A long bead, slender carnelian pendant, with 4 facets and a tapering point, pierced across the broad end ; " long. *Found* B' 44 d 4 ; 14' 6" deep.
308	Terracotta .	Head and shoulders of male figure with conical cap, holding lotus over one shoulder, and possibly a second lotus over the other, which makes it appear to be an image of Surya. *Found* B' 40 d 2 ; 8' 6" deep.
309	Bead . .	A long coarse bone head pierced lengthwise. *Found* B' 44 d 4 ; 14' 6" deep.
310	Pottery .	Seven cups, diam. 4". *Found* B' 43 d 4 ; 6" deep.
311	„ .	Ten cups, 8 measuring 4" and 2 measuring 4¾" in diam. *Found* B' 47 b 2 ; 6' 7" deep.
312	Seal . .	See special List of Seals.
313	Pottery .	Shallow dish, with nearly straight sides and raised decoration at one side of upper edge ; diam. 4¼", height 1½". *Found* C' 47 c 2 ; 5' deep.
314	„ .	Jar ; ht. 2¾", diam. 2½", opening 1¼". *Found* C' 45 a 2 ; 5' 6" deep.
315	Terracotta .	Monkey's head, 1"×1". *Found* C' 47 c 2 ; 5' 6" deep.
316	Brick . .	Large brick with carved edge ; 11½" long by 8¼" wide by 2" thick ; same size occurs in an early structure at Shah-ji-ki-Dheri. *Found* B' 44 c 4 ; 5' 6" deep.
317	„ .	Head of figurine with wig and high headdress, ht. 3", width 2". *Found* B' 47 b 2 ; 5' deep.
318	Seal . .	See special List of Seals.
319	Pottery .	Bowl, ht. 3½", diam. 5¼", opening 4¾". *Found* C' 47 b 1 ; 6' 7" deep.
320-321	Seals . .	See special List of Seals.
322	Terracotta .	Head of figurine, with elaborate headdress, earrings and necklace ; pupils of the eye marked ; 4¾"×2¾". *Found* C' 45 b 2 ; 7' deep.
323	Pottery .	Pot with spout, ht. 4½", diam. 5½", opening 3½". *Found* C' 45 b 2 : 7' deep.
324	„ .	Bowl ; ht. 3½", diam. 7½". *Found* C' 45 b 2 ; 7' deep.
325-326	Seals . .	See special List of Seals.

No.	Class.	Description,, Findspot, etc.
327	Pottery .	Three cups, diam. 5″. *Found* C′ 45 b 2 ; 7′ deep.
328	,, . .	Five cups, diam. 4″. *Found* C′ 46 b 1 ; 7′ 3″ deep.
329	,, .	Vase with narrow neck ; ht. 9″, diam. $4\frac{1}{2}$″ at base ; opening 1″. *Found* A′ 48 a 4 ; 11′ 6″ deep.
330	Bead . .	Round, yellow, spotted with white. *Found* B′ 39 b 4 ; 6′ 6″ deep.
331	Pottery .	Six cups, diam. $3\frac{3}{4}$″. *Found* A′ 48 a 4 ; 11′ 6″ deep.
332	,, .	Jar ; ht. $3\frac{1}{2}$″, diam. $3\frac{1}{2}$″, opening 2″. *Found* A′ 48 a 4 ; 11′ 6″ deep.
333	,, .	Bowl ; ht. $1\frac{1}{2}$″, diam. $3\frac{1}{4}$″, opening 2″. *Found* A′ 48 a 4 ; 11′ 6″ deep.
334	Terracotta .	Standing female figure ; 3″×$1\frac{1}{4}$″. *Found* C′ 47 d 1 ; 7′ 3″ deep.
335	,, .	Head and shoulders of female with headdress ; $2\frac{3}{4}$″×2″. *Found* C′ 45 a 4 ; 6′ 9″ deep.
336	Mould . .	Pattern largely obliterated ; $1\frac{1}{2}$″×$\frac{3}{4}$″. *Found* C′ 45 b 2 ; 7′ deep.
337	Seal . .	See special List of Seals.
338	Terracotta .	Head with headdress ; $4\frac{1}{2}$″×$3\frac{3}{4}$″. *Found* C′ 46 b 1 ; 5′ 11″ deep.
339	Seal . .	See special List of Seals.
340	Misc. . .	Carnelian ornament in the shape of a claw, $1\frac{1}{4}$″ long. *Found* B′ 43 c 4 ; 7′ 6″ deep.
341-344	Seal . .	See special List of Seals.
345	Pottery .	Jar with spout, specked with mica ; ht. $8\frac{1}{2}$″, diam. $8\frac{1}{2}$″, opening 3″. *Found* B′ 43 c 4 ; 7′ 6″ deep.
346	,, .	Jar ; ht. $2\frac{1}{2}$″, diam. $2\frac{1}{2}$″, opening 1″. *Found* B′ 43 b 4 ; 7′ 6″ deep.
347	Seal . .	See special List of Seals.
348	Pottery .	Three cups ; diam. 6″. *Found* A′ 45 a 4 ; 12′ 9″ deep.
349	,, .	Fifteen cups ; diam. 4″. *Found* A′ 45 a 4 ; 12′ 9″ deep.
350	Terracotta .	Grotesque figurine ; female with huge earrings, huge collarette and garland ; $3\frac{1}{2}$″×2″. *Found* C′ 46 a 2 ; 7′ deep.
351	,, .	Horse's head, $3\frac{1}{2}$″×$3\frac{1}{4}$″. *Found* C′ 46 a 2 ; 7′ deep.
352	Pottery .	Three cups ; diam. 5″. *Found* A′ 44 d 2 ; 12′ 9″ deep.
353	,, . .	Seven cups ; diam. $3\frac{1}{2}$″. *Found* A′ 44 d 2 ; 12′ 9″ deep.
354	Terracotta .	Torso of female ; $4\frac{1}{2}$″×4″. *Found* C′ 46 a 2 ; 7′ deep.

No.	Class.	Description, Findspot, etc.
355	Pottery .	Three dishes, all broken ; average diam. 1′. *Found* A′ 45 a 4 ; 13′ deep.
356	Seal . .	See special List of Seals.
357	Terracotta .	Medallion with 8 petalled flower ; diam. ¾″. *Found* B′ 43 a 3 ; 6′ deep.
358	Bead . .	Long bead of banded agate ; polished ; pierced lengthwise. *Found* B′ 40 b 1 ; 10′ deep.
359	Seal . .	See special List of Seals.
360	Misc. . .	Earthen cylinder, perhaps a die, with two faces ; diam. ¾″, length ½″. *Found* A′ 45 d 2 ; 12′ 9″ deep.
361	Terracotta .	Fragment of figurine, showing lower portions of two standing figures ; ht. 2″, width 1¼″. *Found* C′ 40 a 2 ; 10′ 6″ deep.
362	,, . .	Horse's head, with elaborate bridle ; shoulders pierced for wheels ; 3¾″ × 3½″. *Found* B′ 40 a 2 ; 10′ 6″ deep.
363-364	Seals . .	See special List of Seals.
365	Wheel . .	Ornamented type ; diam. 3½″. *Found* C′ 39 c 4 ; 10′ deep.
366	,, . .	Less decorative ; diam. 3¾″. *Found* A′ 45 a 4 ; 13′ 5″ deep.
367	Seal . .	See special List of Seals.
368	Terracotta .	Ram's head, very ornate ; 4½″ in ht., 3½″ across shoulders. *Found* B′ 40 d 2 ; 10′ 9″ deep.
369	Seal . .	See special List of Seals.
370	Wheel . .	Plain, with clearly defined rim ; diam. 3½″. *Found* C′ 46 a 4 ; 7′ 4″ deep.
371	Pottery .	Eleven cups, diam. 4″. *Found* A′ 45 a 4 ; 13′ 6″ deep.
372	Terracotta .	Lower part of a standing figure, ht. 4¼″. *Found* A′ 41 b 2 ; 9′ deep.
373	Pottery .	Jar ; ht. 3″, diam. 3″, opening ⅝″. *Found* C′ 46 a 4 ; 7′ 9″ deep.
374	Wheel . .	Plain, diam. 3¾″. *Found* B′ 45 a 4 ; 8′ deep.
375	Pottery .	Three cups, diam. 6″. *Found* A′ 44 d 2 ; 13′ 6″ deep.
376	Wheel . .	Plain ; diam. 3¾″. *Found* C′ 45 a 4 ; 8′ deep.
377	Pottery .	Four cups ; diam. 5½″. *Found* C′ 46 a 4 ; 7′ 9″ deep.
378	Misc. . .	Pottery fragment resembling a stopper, with decorated end ; 2″ long. *Found* B′ 40 a 2 ; 11′ deep.
379	Seal . .	See special List of Seals.
380	Wheel . .	Plain ; diam. 4″. *Found* C′ 39 c 4 ; 10′ 6″ deep.

No.	Class.	Description, Findspot, etc.
381	Wheel . .	Plain: diam. 4½". *Found* C′ 45 a 4; 8′ deep.
382	Pottery .	Jar; ht. 7½", diam. 6", opening ⅞". *Found* A′ 45 a 4; 13′ deep.
383	Wheel . .	Ornate; diam. 4". *Found* A′ 45 a 4; 13′ deep.
384	Misc. . .	Terracotta amulet, circular, pierced by two parallel holes; one side decorated in high relief with figure of a seated goddess, holding a (?) dagger in upraised left hand; to the right kneels a female devotee; diam. 1¼". *Found* A′ 41 b 3; 9′ 10" deep.
385	Terracotta .	Head (broken); both pupil and iris of the eye indicated; lips half opened in a smile; ht. 3". *Found* C′ 45 a 4; 8′ deep.
386	,, . .	Fragment showing the feet of some standing figure; ht. 1¾", width 1½". *Found* B′ 43 d 1; 7′ 9" deep.
387	,, .	Leg and foot, with anklet; 4" long. *Found* C′ 45 a 4; 8′ deep.
388	Wheel . .	Plain; diam. 3½". *Found* A′ 45 a 4; 11′ 3" deep.
389	Pottery .	Jar; ht. 2¾", diam. 1½", opening ¾". *Found* C′ 48 b 1; 8′ 6" deep.
390	Terracotta .	Lower portion of standing figure wearing a broad girdle caught with a square buckle and falling in folds to the feet which wear anklets; 3½" high, 1½" wide. *Found* A′ 45 a 4; 11′ 6" deep.
391	Pottery .	Thirteen cups; diam. 4". *Found* A′ 45 a 4; 11′ 6" deep.
392	,, .	Jar, ht. 2½", diam. 3½", opening 1¾". *Found* B′ 48 b 1; 8′ 3" deep.
393	,, .	Pot with short spout; ht. 1¼", diam. 2½", opening 1¼". *Found* C′ 48 b 1; 8′ 6" deep.
394	Wheel . .	Plain; diam. 3¾". *Found* C′ 48 b 1; 8′ 6" deep.
395	Pottery .	Bowl; ht. 2¾", diam. 7¾". *Found* A′ 45 a 4; 12′ deep.
396-398	Seals . .	See special List of Seals.
399	Pottery .	Seven cups; diam. 3¾". *Found* B′ 45 b 2; 8′ 6" deep.
400	Seal . .	See special List of Seals.
401	Brick . .	Two large bricks measuring A. 15½"×14"×2¼" the width being incomplete (the bricks of the Piprahwa Stupa are 16" ×10½"×3"), and B. 10½" × 9" ×2¼", being an irregular fragment only. *Found* C′ 40 b 1; 13′ 3" deep.
402	Terracotta .	Head, damaged; ht. 5". *Found* B′ 45 a 4; 8′ 6" deep.
403	,, .	A toy horse, one leg missing; the other three are all pierced for wheels; 5½" long, 3½" high. *Found* C′ 46 a 4; 8′ 6" deep.
404	Seal . .	See special List of Seals.

No.	Class.	Description, Findspot, etc.
405	Pottery .	Seven cups; diam. 4½″. *Found* B′ 48 b 1; 8′ 6″ deep.
406	Wheel . .	Plain; diam. 3¾″. *Found* C′ 48 b 1; 9′ deep.
407	Terracotta .	Toy bull, badly fractured. *Found* B′ 45 b 2; 9′ deep.
408	Pottery .	Cup; ht. 2″, diam. 3½″, opening 3″. *Found* C′ 48 b 1; 9′ deep.
409	,, .	Ten cups, diam. of all 4″ to 5″. *Found* C′ 45 a 4; 9′ 3″ deep.
410-411	Seals . .	See special List of Seals.
412	Bead . .	Carnelian, round. *Found* B′ 45 b 2; 9′ deep.
413	Terracotta .	Toy ram's head, shoulders pierced for wheels. *Found* B′ 40 b 3; 12′ 6″ deep.
414	Pottery .	Jar; ht. 2½″, diam. 3″, opening 1¾″. *Found* C′ 48 b 1; 9′ 3″ deep.
415	,, .	Two covers with knobs; diam. 1¾″. *Found* B′ 42 d 1; 6′ 6″ deep.
416	Terracotta .	A toy duck, length 1¾″, ht. 1¼″. *Found* B′ 41 d 4; 12′ 9″ deep.
417	Stone . .	Fragment of sandstone preserving its beautiful Mauryan polish; rectangular, 2½″×2″. *Found* D′ 41 c 4: 17′ 10″ deep.
418-419	Seals . .	See special List of Seals.
420	Bead . .	Bead of crystal, barrel-shaped, pierced lengthwise, 1″ long. *Found* B′ 45 b 2; 9′ deep.
421-422	Seals . .	See special List of Seals.
423	Terracotta .	Head with elaborate jewelled headdress and rich earring; 1¾″×1¼″. *Found* D′ 41 c 4; 18′ 3″ deep.
424	Pottery .	Shallow dish with central socket, perhaps a lamp; ht. 1″, diam. 5″. *Found* B′ 40 b 3; 13′ 6″ deep.
425	Terracotta .	Legs and lower body of standing figure wearing girdle; ht. 3½″, width 2½″. *Found* C′ 45 a 4; 9′ 9″ deep.
426	Brick . .	Measures 17″×11″×2½″. Bricks measuring 16¾″×11″×2¾″ at Sarnath appear to be of Mauryan date, and the present specimen is of a size suitable for that period. But it is an extraordinary fact that a recrudescence of this size has been observed in the Gupta period. Thus the units of the brick temple at Bhitargaon, assigned to the 4th century A.D., measure 17″×10″×3″. *cf.* A. S. R. 1906-07, p. 69 for Sarnath, and A. S. R. 1908-09, p. 6 for Bhitargaon. Gupta bricks of even larger size occur at Saheth Maheth; *cf.* A. S. R. 1910-11, p. 14. *Found* C′ 40 b 1; 12′ 9″ deep.
427	Pottery .	Fragment of glazed ware, showing dark green, dirty yellow and brown; coarse texture. *Found* B′ 45 b 4; 8′ 6″ deep.

No	Class.	Description, Findspot, etc.
428	Misc. . .	Terracotta cylinder for grinding spices; now flattened on two sides; measures 9″×3″×1¼″. *Found* B′ 40 b 4; 12′ deep.
429	,, . .	Circular terracotta die or mould, diam. ⅝″, such as must have been used for stamping ornamental bosses or medallions on toy animals. *Found* B′ 44 a 1; 16′ deep.
430	Bead . .	Black, banded with white. *Found* B′ 45 b 4; 8′ 6″ deep.
431	Terracotta .	Fragment from the base of some plaque, showing five feet (or paws ?) above a railing; measures 3½″×2″. *Found* B′ 41 b 2; 12′ deep.
432	,, .	Ram's head, pierced for wheels; 5″ long, 3¼″ across shoulders. *Found* B′ 40 a 1; 13′ deep.
433	Coin . .	A small, punchmarked coin. *Found* B′ 44 b 1; 16′ deep.
434	Terracotta .	Ram's head, very ornate, pierced for wheels; 4¼″ long, 4″ across shoulders. *Found* B′ 41 a 4; 12′ deep.
435	Pottery .	Jar, with ornamented top; ht. 4¾″, diam. 5¼″, opening (broken) now ½″. *Found* B′ 41 a 4; 10′ deep.
436	Seal . .	See special List of Seals.
437	Pottery .	Jar, neck broken; ht. 3¾″, diam. 4″, opening 1½″. *Found* C′ 47 d 1; 9′ deep.
438	,, .	Small round jar; ht. 1¾″, diam. 1¾″, opening 1″. *Found* C′ 47 d 1; 9′ deep.
439	Terracotta .	Ram's head, 4½″ long. *Found* C′ 40 b 1; 12′ 9″ deep.
440	Brick . .	Measures 16″×10″×2½″. Bricks were found at Piprahwa 16″×10½″×3″. *Found* C′ 40 b 1; 12′ 9″ deep.
441	Bead . .	Two specimens, A. small round carnelian; B. larger, mottled, translucent brown. *Found* B′ 39 c 3; 11′ deep.
442	Misc. . .	Fragment of very pure crystal originally dressed, now about 1½″ across. *Found* C′ 47 d 1; 9′ 3″ deep.
443	Pottery .	Potter's dabber, very heavy, with round socket in the top; diam. of face 4½″, ht. 4″. *Found* B′ 43 a 4; 7′ 6″ deep.
444	Terracotta .	Spout, in shape of a makara's head, now broken; length 5″. *Found* B′ 39 c 3; 12′ 9″ deep.
445	,, .	Doll, ht. 4″. *Found* C′ 41 d 4; 10′ 6″ deep.
446	Seal . .	See special List of Seals.
447	Pottery .	Earthen cup; ht. 2½″, diam. 4″. *Found* B′ 48 b 1; 9′ 6″ deep.
448	,, .	Four cups, average diam. of three 4″, diam. of the fourth 5″. *Found* B′ 48 b 1; 9′ 6″ deep.
449-450	Seals . .	See special List of Seals.

No.	Class.	Description, Findspot, etc.
451	Terracotta .	Figure, lower portion of standing human figure, with garment falling in close folds; ht. 4¾″, width 2″. *Found* B′ 41 a 1; 11′ 7″ deep.
452	„ .	Die, rectangular area, sunken 1½″×1″. *Found* C′ 39 c 4; 12′ 9″ deep.
453	Seal . .	See special List of Seals.
454	Pottery .	Earthen jar, necked; measures ht. 2½″, diam. 3″, opening 1″. *Found* C″ 47 a 2; 3′ deep.
455-456	Seals . .	See special List of Seals.
457	Pottery .	Two earthen bowls, diam. 6¾″, ht. 2½″. *Found* C′ 40 b 3; 13′ 6″ deep.
458	„ .	Small earthen jar, ht. 1½″, opening 1½″, diam. of vase about 1″. *Found* B′ 45 c 4; 12″ deep.
459	„ .	Earthen jar with spout lost; ht. 4¼″, diam. 4″, opening 1½″. *Found* C′ 45 a 4; 3′ deep.
460	„ .	Small earthen bowl, ht. 1½″, diam. 3¼″, opening 1¾″. *Found* C′ 46 c 4; 3′ deep.
461	Terracotta .	Figure, crude female with both arms and feet lost, ht. 4″. *Found* A′ 40 b 1; 12′ 6″ deep.
462	Pottery .	Tall narrow earthen vase, ht. 3¾″, diam. 1¾″, opening ⅞″. *Found* C′ 46 c 4; 3′ deep.
463	Mould . .	Die, circular area, with reversed raised character reading "*Bu*" and then a broken one looking like "*dhu*," diam. ⅝″. *Found* B′ 45 c 4; 12′ 3″ deep.
464	Stone . .	Fragment, rudely ornamented with lines; measures 3¼″×3″. *Found* C′ 45 a 4; 3′ 6″ deep.
465	Pottery .	Large round earthen jar with a spout, with various bands of simple incised ornament in geometric style, ht. 9″, diam. 10″, across opening 5¾″. *Found* C′ 46 c 4; 3′ deep.
466	„ .	Lid (or shallow dish ?); ht. 1½″, diam. 6″. *Found* B′ 45 c 4; 12′ deep.
467	Terracotta .	Head, badly worn; apparently hair dressed like a heavy wig, 2″×1¾″. *Found* B′ 43 a 4; 1′ deep.
468	„ .	Fragment, lower body and legs (without feet) of standing human figure; 3″×2″. *Found* B′ 40 a 2; 12′ 6″ deep.
469	„ .	Fragment, head and shoulders of female figure with elaborate headdress, 2¼″×1¾″. *Found* B′ 41 a 2; 15′ deep.
470	„ .	Fragment, figurine, head and shoulders of female, 2¼″×2¼″. *Found* B′ 40 a 2; 12′ 6″ deep.
471	„ .	Toy animal (bear) four legs broken. *Found* C′ 40 b 3; 13′ deep.

No.	Class.	Description, Findspot, etc.
472	Terracotta .	Fragment, pedestal, showing lotus design with two feet of standing human figure, ht. 2″, width $2\frac{3}{4}$″. *Found* C′ 39 c 4 ; 13′ 9″ deep.
473	,, .	Wheel plain type, diam. $3\frac{1}{4}$″, thickness through hub $1\frac{1}{4}$″. *Found* C′ 39 c 4 ; 13′ 9″ deep.
474	,, .	Ram's head and shoulders for wheels, $4\frac{1}{4}$″ high, $3\frac{1}{2}$″ across shoulders. *Found* C′ 49 c 4 ; 13′ 9″ deep.
475	,, .	Figurine, standing figure with animal, perhaps Durga and the lion ? ; measures 4″×2″. *Found* B′ 45 c 4 ; 14′ 8″ deep.
476	Misc. . .	Clay cylinder, both flat ends showing concentric circles of minute holes, ht. $1\frac{7}{8}$″, diam. $1\frac{1}{4}$″. *Found* B′ 40 a 3 ; 13′ deep.
477	Seal . .	See special List of Seals.
478	Terracotta .	Die, with broken handle ; circular face, floral design ; diam. $1\frac{1}{2}$″. *Found* A′ 40 b 1 ; 13′ deep.
479	,, .	Figurine, a seated male with a sack on his back, ht. $3\frac{1}{4}$″, width $1\frac{3}{4}$″. *Found* B′ 43 a 4 ; 8′ deep.
480	Stone . .	Small block of sandstone, $3\frac{1}{2}$″×$2\frac{1}{2}$″×$2\frac{3}{4}$″. *Found* C′ 39 c 4 ; 13′ 9″ deep.
481	,, . .	Fragment of sandstone cylinder, one side polished ; now worn flat, measures $5\frac{1}{2}$″×$2\frac{1}{2}$″×$1\frac{3}{4}$″. *Found* C′ 39 c 4 ; 13′ 9″ deep.
482	Seal . .	See special List of Seals.
483	Pottery .	Small jar, ht. 3″, diam. $2\frac{1}{2}$″, opening $1\frac{1}{4}$″. *Found* C′ 39 c 4 ; 14′ 3″ deep.
484	Terracotta .	Ram's head (in two pieces), horns broken, ht. $4\frac{3}{4}$″, $3\frac{3}{4}$″ across shoulders. *Found* C′ 39 c 4 ; 14′ 3″ deep.
485-486	Seals . .	See special List of Seals.
487	Misc. . .	Clay domino, broken. *Found* S′ 25 c 1 ; 3″ deep.
488-489	Seals . .	See special List of Seals.
490	Pottery .	Earthen pot with spout broken, ht. 4″, diam. $5\frac{1}{4}$″, $3\frac{1}{4}$″ across opening. *Found* C′ 46 a 4 ; 6′ 3″ deep.
491	,, .	Earthen lamp, with lip and high central projection ; edge broken in two places, ht. $4\frac{1}{4}$″, diam. $4\frac{1}{4}$″. *Found* B′ 43 a 3 ; 4′ 6″ deep.
492	Bead . .	Bead of crystal barrel-shaped, with 6 longitudinal facets ; pierced lengthwise $\frac{5}{8}$″ long. *Found* S 25 a 1 ; 9″ deep.
493	Metal . .	Bangle, very small. *Found* T 23 b 1 ; 6″ deep.
494	Seal . .	See special List of Seals.

No.	Class.	Description, Findspot, etc.
495	Terracotta .	Fish, 5″ long, $2\frac{1}{2}$″ high, 2″ thick. *Found* U 21 c 1 ; 3″ deep.
496	Wheel . .	Plain style ; $4\frac{1}{4}$″ diam., $1\frac{3}{4}$″ through hub. *Found* V 19 a 2 ; 4″ deep.
497	Pottery .	Fragment of pottery decorated with incised lines. *Found* W 17 a 3 ; 3″ deep.
498	Bead . .	Pinkish-white opaque stone, pierced. *Found* U 19 b 1 ; 3″ deep.
499	Terracotta .	Figurine, head and shoulders of female figure, $2\frac{1}{4}$″ × $1\frac{3}{4}$″ broad. *Found* S 25 a 4 ; 9″ deep.
500	„ .	Figurine, head and shoulders of female with lotus over right shoulder, ht. $2\frac{3}{4}$″, width $2\frac{1}{2}$″. *Found* U 21 b 2 ; 6″ deep.
501	„ . .	Figurine, of orange red colour ; head and shoulders of female (face missing) ht. $2\frac{1}{2}$″, width. $2\frac{1}{4}$″. *Found* U 21 b 2 ; 6″ deep.
502	Pottery .	Earthen vase, ht. $2\frac{1}{2}$″, diam. $1\frac{3}{4}$″, opening 1″. *Found* U 2 b 2 ; 6″ deep.
503	Terracotta .	Dice, long cube, square in section ; $1\frac{3}{8}$″ long, $\frac{5}{8}$″ diam. *Found* Z c 2 ; 6″ deep.
504	Pottery .	Triangular fragment of very light pottery decorated with leaf design ; 2″ × 2″ × 3″ a side, but broken. *Found* V 19 a 2 ; 6″ deep.
505	Terracotta .	Die, concave circular area, diam. $1\frac{1}{4}$″, with conventional palm leaf. *Found* U 21 a 4 ; 3″ deep.
506	Wheel . .	Absolutely undecorated ; diam. $3\frac{1}{4}$″, $1\frac{1}{2}$″ through hub. *Found* Z 11 a 4 ; 8″ deep.
507	Bead . .	Roughly round, of white opaque stone pierced. *Found* B′ 43 a 4 ; 6′ 3″ deep.
508	„ . .	Barrel-shaped, of translucent red (cornelian ?). *Found* W 17 a 1 ; 6″ deep.
509	Coin . .	A copper coin, thick, irregular, unidentifiable ; perhaps Muhammadan. *Found* V 19 g 4 ; 6″ deep.
510	Brick . .	Fragment of coarsely carved brick 5″ × $2\frac{1}{4}$″. *Found* S 25 b 2 ; 1′ deep.
511	Coin . .	A copper coin, *cf.* V. Smith's Cat. Ind. Mus., p. 202, Plate XXIII, fig. 3. *Found* A′ 9 b 2 ; 3″ deep.
512	Terracotta .	Figurine, head and shoulders of grotesque human figure, $3\frac{1}{2}$″ × $2\frac{1}{4}$″ wide. *Found* V 19 a 2 ; 9″ deep.
513	„ .	Ram's head, right horn broken ; shoulders pierced for wheels. $4\frac{1}{2}$″ high, $3\frac{1}{2}$″ across shoulders. *Found* U 21 d 1 ; 8″ deep.
514	Pottery .	Earthen cup, shallow, with stand (perhaps a lamp), measures ht. $1\frac{1}{2}$″, diam. 3″. *Found* U 21 d 2 ; 10″ deep.
515	Wheel . .	Plain type (broken) measures $3\frac{1}{2}$″ diam. $1\frac{1}{2}$″ through hub. *Found* V 19 d 1 ; 8″ deep.

No.	Class.	Description, Findspot, etc.
516	Terracotta .	Figurine, headless body of a female, 4″ high, 2½″ across shoulders, 1¼″ waist, 2¾″ hips. *Found* U 21 d 4 ; 9″ deep.
517	Pottery .	Earthen cup, ht. 1½″, diam. 2¼″. *Found* U 21 d 3 ; 10″ deep.
518	Terracotta .	Figurine, head and shoulders of a human figure standing under a flowering tree (?), ht. 2″, width 1½″. *Found* B′ 42 c 2 ; 16′ 6″ deep.
519	,, .	Fragment of figurine, 2½″ high. *Found.*
519A	Stone . .	Fragment of smooth red stone, very fine grained, 2½″×1¾″. *Found* U 21 d 3 ; 1′ deep.
520	Pottery .	Earthen jar, ht. 1¾″, diam. 1¾″, across opening ¾″. *Found* U 21 d 3 ; 1′ deep.
521	,, .	Earthen dish, flat, ht. ¼″, diam. 2½″. *Found* V 19 d 2 ; 10″ deep.
522	Stone . .	Fragment of highly dressed and highly polished black stone. *Found* A′ 9 b 2 ; 9″ deep.
523	Pottery .	Earthen jar, ht. 2½″, diam. 2½″, across opening 1″. *Found* V 19 d 4 ; 1′ deep.
524	,, .	Tile, broken, 6½″×5″×¾″ thick. *Found* U 21 d 3 ; 9″ deep.
525	,, .	Earthen jar, ht. 6″, diam. 6″, across opening 2½″. *Found* C′ 46 a 3 ; 3′ deep.
526	,, .	Earthen jar, ht. 2″, diam. 2″, across opening 1½″. *Found* C′ 46 a 3 ; 3′ deep.
527	Seal . .	See special List of Seals.
528	Pottery .	Fragment of blue and white glazed pottery. *Found* S 25 b 2 ; 1′ deep.
529	Terracotta .	Head, ht. 1½″, width 1½″. *Found* Z 11 a 3 ; 1′ 8″ deep.
530	,, . .	Head, crude, 3″×3″. *Found* Z 11 b 3 ; 1′ 5″ deep.
531	Wheel . .	Plain style, diam. 1½″ through hub. *Found* U 21 a 4 ; 1′ 10″ deep.
532	Terracotta .	Plaque, lower portion only, of standing human figure, 3¼″ high by 2½″ wide. *Found* V 19 b 3 ; 1′ 8″ deep.
533	,, .	Statuette, headless female, 3″ high by 1¾″ wide. *Found* X 15 a 2 ; 1′ 6″ deep.
534-535	Seals . .	See special List of Seals.
536	Bead . .	Banded stone, opaque white, translucent pink ; cut barrel-shaped by means of facets. *Found* S 25 b 1 ; 1′ 10″ deep.
537	,, . .	Round, opaque white. *Found* U 21 d 4 ; 2′ 3″ deep.
538	Brick . .	A carved brick. *Found* V 19 a 2 ; 1′ 6″ deep.

No.	Class.	Description, Findspot, etc.
539	Terracotta .	Head, defaced, ht. $3\frac{1}{2}''$, width. $2\frac{1}{2}''$. *Found* S 25 b 1 ; 2′ deep.
540	Pottery .	Earthen dish, shallow ; ht. 1″, diam. $3\frac{1}{2}''$. *Found* U 21 d 3 ; 2′ deep.
541	Wheel . .	Plain style, diam. 4″, through hub $1\frac{1}{4}''$. *Found* V 19 b 3 ; 1′ 10″ deep.
542	Misc. . .	Fluted Ear-stud or button (of terracotta?). *Found* A′ 9 b 2 ; 1′ 4″ deep.
543	Pottery .	Large earthen pot with small spout, ht. 9″, diam. 9″ opening 4″. *Found* X 15 a 3 ; 2′ deep.
544	Stone . .	Lid or cover, circular, diam. $3\frac{1}{4}''$, edge upright measures $\frac{7}{8}''$. Tall handle in centre, broken. *Found* V 19 b 1 ; 1′ 8″ deep.
545	Bead . .	Long, barrel shaped, of translucent banded agate (?) brown and amber colour. Pierced lengthwise. *Found* V 19 b 2 ; 1′ 8″ deep.
546	Terracotta .	Plaque, lower part standing figure, ht. 3″, width. $2\frac{1}{2}''$, *cf.* 532. *Found* U 21 d 4 ; 2′ 3″ deep.
547	Pottery .	Earthen jar, ht. $2\frac{1}{4}''$, diam. $2\frac{1}{2}''$, opening $1\frac{1}{2}''$. *Found* X 15 a 3 ; 2′ deep.
548	Stone . .	Round stone ball, perhaps missile, mottled dark red and dirty white. Diam. $1\frac{1}{2}''$. *Found* U 21 a 1 ; 1′ 3″ deep.
549	Pottery .	Earthen jar, with rounded base, projecting slightly, ht. 3″, diam. 3″, opening $1\frac{1}{2}''$. *Found* X 15 c 1 ; 1′ 10″ deep.
550	Terracotta .	Plaque, (worn) standing figure (feet missing) apparently wearing head-dress and large earrings and possibly winged. Indistinct objects to right and left, ht. $3\frac{1}{2}''$, width. 3″. *Found* V 19 a 4 ; 2′ deep.
551	Misc. . .	Clay die or mould, rectangular area, length $1\frac{1}{4}''$, width 1″ Device. *Found* X 15 c 2 ; 1′ 10″ deep.
552	Terracotta .	Figure of a bear standing on a circular floral (?) base. Some smaller figure broken from the bear's back, ht. $1\frac{1}{2}''$, length of bear $1\frac{1}{2}''$, diam. of base $1\frac{1}{2}''$. *Found* S 25 d 1 ; 2′ 7″ deep.
553	,, .	Finial, broken, ht. 7″, diam. $3\frac{3}{4}''$. *Found* C′ 46 a 3 ; 6′ 5″ deep.
554	,, .	Head, crude, ht. $3\frac{3}{4}''$ by 3″. *Found* V 19 a 4 ; 2′ deep.
555	Misc. . .	Clay dice, oblong, square end, ht. $1\frac{1}{2}''$, diam. $\frac{5}{8}''$. *Found* Z 11 b 3 ; 2′ 3″ deep.
556-560	Seals .	See special List of Seals.
561	Terracotta .	Mould, concave (shell pattern ?). Length $1\frac{3}{4}''$, width $1\frac{1}{4}''$. *Found* V 19 a 1 ; 2′ deep.
562	Pottery .	Earthen pot, ht. $5\frac{1}{2}''$, diam. 7″, opening $4\frac{3}{4}''$. *Found* C′ 45 a 3 ; 9′ deep.
563	,, .	Earthen jar, rim broken, ht. $3\frac{1}{2}''$, diam. 4″, opening $1\frac{1}{4}''$. *Found* C′ 45 a 1 ; 6′ 9″ deep.

No.	Class.	Description, Findspot, etc.
564	Pottery .	Earthen dish, with wide rim and curving base, ht. 2″, diam. 6½″. *Found* C′ 45 a 1 ; 7′ deep.
565	„ .	Earthen bowl, ht. 3″, across base 2″, across top 6½″. *Found* C′ 45 a 3 ; 9′ 3″ deep.
566	„ .	Earthen bowl, ht. 2½″, across base 2″, across top 5¾″. *Found* C′ 45 a 3 ; 9′ 3″ deep.
567	„ .	Seven cups aver. diam. c. 4¼″. *Found* C′ 45 a 3 ; 8′ deep.
568	„ .	Three cups, diam. 3½″. *Found* C′ 45 a 3 ; 9′ deep.
569	Terracotta .	Plaque, fragment, body and legs (footless) of standing human figure, ht. 2¾″, width 2½″. *Found* V 19 a 1 ; 2′ 6″ deep.
570	Bead . .	Transparent white, flat, rectangular shape, pierced lengthwise. *Found* Y 13 b 2 : 2′ 4″ deep.
571	Pottery .	Earthen disc (cover ?) pierced in centre and slightly raised, diam. 3¾″. *Found* A′ 9 c 3 ; 1′ 10″ deep.
572	Seal . .	See special List of Seals.
573	Bead . .	Two beads, *a*—crystal, barrel-shaped not pierced, *b*--opaque banded red—with white spots. *Found* V 19 a 3 ; 2′ 6″ deep.
574	Misc. . .	Clay signet, oval face, tapering above and pierced. Area measures 1″ by ⅞″, device, trisula in centre, to r and l ? ? Beneath, 2 lines. Legend Banjulaka, for Vanjulaka. *Found* S 25 b 2 ; 3′ deep.
575	Seal . .	See special List of Seals.
576	Terracotta .	Head and shoulders of terracotta statuette, female ; ht. 2½″, width 1½″. *Found* A′ 42 d 2 ; 7′ 6″ deep.
577	Metal . .	Metal stand, three legged, circular, fluted edge, ht. 1″, diam. 2¼″. *Found* Y 13 a 3 ; 2′ 7″ deep.
578	Terracotta .	Head, injured, ht. 2¼″, width 2½″. *Found* V 19 b 4 ; 2′ 8″ deep.
579-580	Seals . .	See special List of Seals.
581	Pottery .	Shaped like an hour-glass ; perhaps a toy double headed drum, ht. 2¼″, opening 2″. *Found* C′ 46 a 2 ; 5′ 8″ deep.
582	Stone . .	Fragment of stone (red sandstone ?), now a truncated triangle, flat both sides, one face carved in an elaborate floral pattern, length 3″, width at top 1¼″, width at bottom 3¼″. *Found* C′ 46 a 2 ; 5′ 10″ deep.
583	Pottery .	Two cups, diam. 3¾″. *Found* C′ 46 a·4 ; 6′ 5″ deep.
584	Terracotta	Head of terracotta statuette, ht. 2″, width 1″. *Found* C′ 45 a 3 ; 10′ deep.
585	Pottery .	Earthen jar, ht. 2½″, diam. 3″, opening 1½″. *Found* Z 11 a 1 ; 3′ 3″ deep.

No.	Class.	Description, Findspot, etc.
586	Pottery .	Earthen jar, ht. $2\frac{1}{2}''$, diam. $3\frac{1}{2}''$, opening $2\frac{3}{4}''$. *Found* X 15 d 1 ; 2′ 7″ deep.
587	,, .	Earthen jar, ht. $3\frac{1}{4}''$, diam. $2\frac{1}{2}''$, opening $1\frac{1}{4}''$. *Found* U 21 d 4 ; 3′ deep.
588-590	Seals . .	See special List of Seals.
591	Pottery .	Earthen jar, ht. 4″, diam. $4\frac{1}{4}''$, opening $3\frac{3}{4}''$. *Found* C′ 45 a 3 · 11′ deep.
592	,, .	Earthen bowl, ht. 2″, diam. $3\frac{1}{4}''$. *Found* C′ 45 a 3 ; 11′ deep.
593	,, .	Earthen jar, ht. $2\frac{1}{2}''$, diam. $2\frac{1}{4}''$, opening 1″. *Found* C′ 45 a 3 ; 11′ deep.
594	,, .	Earthen dish, pointed base and rim, ht. $2\frac{1}{4}''$, across curving base $1\frac{3}{4}''$, across top $6\frac{1}{2}''$. *Found* C′ 46 a 1 ; 6′ 5″ deep.
595	,, .	Earthen jar, ht. $4\frac{1}{2}''$, diam. $3\frac{1}{4}''$, opening $\frac{3}{4}''$. *Found* C′ 46 a 1 ; 5′ 8″ deep.
596	,, .	Earthen jar, ht. $5\frac{1}{4}''$, diam. $3\frac{1}{2}''$, opening 1″. *Found* C′ 46 a 1 ; 5′ 8″ deep.
597	,, .	Fragment, perhaps the point of a finial, ht. $2\frac{1}{2}''$, diam. $2\frac{1}{4}''$. *Found* C′ 45 a 3 ; 9′ 6″ deep.
598	,, .	Earthen jar, ht. $3\frac{1}{2}''$, diam. $2\frac{3}{4}''$, opening $1\frac{1}{4}''$. *Found* V 19 b 4 ; 2′ 8″ deep.
599	Terracotta .	Plaque, in shape of a decorated flask ? $3'' \times 2\frac{1}{2}''$. *Found* Y 13 b 1 ; 2′ 10″ deep.
600-601	Seals . .	See special List of Seals.
602	Bead . .	Large clay bead, $1\frac{1}{8}''$ long, pierced lengthwise. *Found* S 25 d 3 ; 3′ deep.
603-607	Seals . .	See special List of Seals.
608	Pottery .	Earthen jar, ht. 3″, diam. $2\frac{1}{2}''$, opening $1\frac{1}{8}''$. *Found* V 19 a 2 ; 2′ 10″ deep.
609	Bead . .	Carnelian, long, barrel-shaped, pierced lengthwise. *Found* V 19 a 2 ; 2′ 10″ deep..
610	Seal . .	See special List of Seals.
611	Bead . .	Carnelian, round. *Found* U 21 a 3 ; 3′ deep.
612	Seal . .	See special List of Seals.
613	Terracotta .	Mould, $1\frac{3}{8}''$ long by 1″. *Found* U 21 a 2 ; 2′ 10″ deep.
614	Pottery .	Earthen dish, round, with rounded base and sloping sides, ht. $1\frac{3}{4}''$, diam. $2\frac{3}{4}''$, opening 2″. *Found* V 19 a 1 ; 2′ 10″ deep.
615	,, . .	Earthen bowl, ht. $2\frac{3}{4}''$, across top $4\frac{1}{2}''$. *Found* V 19 a 1 ; 2′ 10″ deep.
616	,, . .	Two earthen dishes, ht. about $1\frac{3}{4}''$, across top $5\frac{1}{2}''$. *Found* X 15 c 4 ; 3′ deep.

No.	Class.	Description, Findspot, etc.
617	Terracotta .	Head, ht. 5″, width $3\frac{3}{4}''$. *Found* W 17 a 2 ; 3′ 3″ deep.
618	Pottery .	Earthen jar, ht. $3\frac{1}{4}''$, across base $1\frac{5}{8}''$, diam. 3″, opening 1″. *Found* A′ 42 2 ; 9′ 3″ deep.
619	,, .	Earthen jar, ht. 3″, across base $1\frac{3}{4}''$, diam. $3\frac{1}{4}''$, opening $\frac{3}{4}$. *Found* A′ 42 d 2 ; 9′ 3″ deep.
620	Seal . .	See special List of Seals.
621	Wheel . .	The two sides different, diam. $3\frac{3}{4}''$, through hub $1\frac{1}{4}''$. *Found* V 19 a 2 ; 2′ 10″ deep.
622	Misc. . .	Long bone dice, roughly $2\frac{1}{4}''$ long by $\frac{1}{2}''$. *Found* C′ 46 a 1 ; 6′ 10″ deep.
623	Wheel . .	Quite plain, and hollow, diam. $3\frac{3}{4}''$, through hub 2″. *Found* 17 a 3 ; 2′ 7″ deep.
624	Seal . .	See special List of Seals.
625	Mould .	Clay mould ; device, makara, diam. $1\frac{3}{4}''$. *Found* W 17 b 1 ; 2′ 8″ deep.
626	,, . .	Clay mould, device, $2'' \times 1\frac{1}{4}''$. *Found* V 19 b 1 ; 3′ deep.
627	Misc. . .	Clay tortoise, length $2\frac{1}{2}''$, width 2″. *Found* S 25 b 4 ; 5′ deep.
628	Bead . .	Round bead, opaque bluish grey, blotched with red ; pierced. *Found* S 25 a 2 ; 4′ 6″ deep.
629-635	Seals . .	See special List of Seals.
636	Bead . .	Round carnelian, spotted white, pierced. *Found* W 17 b 2 ; 2′ 10″ deep
637	Misc. . .	Flat round disc of banded agate, with hole in centre. *Found* 19 a 4 ; 3′ deep.
638	Bead . .	Rough light green glass, with facets, iridescent. *Found* W 17 b 4 ; 2′ 10″ deep.
639	Wheel . .	Small terracotta wheel, diam. 2″, through hub $\frac{7}{8}''$. *Found* U 21 b 2 ; 2′ 3″ deep.
640	Pottery .	Earthen jar, ht. 3″, across base $1\frac{1}{2}''$, diam. $3\frac{1}{4}''$, opening $1\frac{1}{2}''$. *Found* V 19 b 1 ; 3′ deep.
641	Terracotta .	Head, rude style. Total length of fragment 4″. *Found* W 17 b 2 ; 3′ deep.
642	,, .	Head, rude, ht. $3\frac{1}{2}''$. *Found* W 17 b 2 ; 3′ deep.
643	,, .	Plaque, broken head and shoulders of female with high headdress, measures $2\frac{1}{4}''$ high, $1\frac{7}{8}''$ wide. *Found* A′ 43 b 4 ; 8 3″ deep.
644	Brick . .	A carved brick, said to be a goldsmith's mould, length $3\frac{3}{4}''$, width $3\frac{3}{4}''$, thickness $1\frac{3}{4}''$. *Found* C′ 5 d 1 ; 2′ 7″ deep.

No.	Class.	Description, Findspot, etc.
645	Terracotta .	Tablet, rectangular, both faces covered with kind of wedge shaped incisions, 3¾″ by 2¾″ by ¾″ thick. *Found* V 19 b 1 ; 3′ deep.
646	„ .	Leg and foot of terracotta statuette. *Found* C′ 5 d 1 ; 2′ 7″ deep.
647	Pottery .	Three small earthen jars, ht. about 3½″, diam. 2″, opening 1″. *Found* V 19 b 1 ; 3′ deep.
648-651	Seals . .	See special List of Seals.
652	Bead . .	Crystal bead, 1⅛″ long, six sided, pierced lengthwise. *Found* W 17 b 1 ; 3′ 4″ deep.
653	„ . .	Round, carnelian, unpierced. *Found* 17 b 1 ; 3′ 4″ deep.
654	Pottery .	Two cups, diam. 4″. *Found* C′ 5 d 1 ; 2′ 7″ deep.
655	Bead . .	Crystal bead, like No. 652. *Found* W 17 b 4 ; 3′ 4″ deep.
656	„ . .	Very irregular in shape ; of green glass. *Found* V 19 b 3 ; 3′ deep.
657	Terracotta .	Statuette, torso only, ht. 3½″. *Found* B′ 7 c 1 ; 3′ deep.
658	Misc. . .	Lady's comb, of bone, top decorated with bird on one side and flower bud on the other. Teeth lost. *Found* B′ 7 c 1 ; 3′ deep.
659	Pottery .	Earthen bowl, ht. 3¼″, diam. 4½″, opening 4″. *Found* X 15 a 4 ; 3′ 5″ deep.
660	Terracotta .	Fish on circular stand, length 3¼″, ht. 2¼″. *Found* X 15 a 1 ; 3′ 3″ deep.
661	„ .	Plaque, ht. 6″, broad 3¼″. Represents a human figure (male ?) standing facing on a lotus ; possibly winged. Elaborate floral ornament r and l. *Found* U 21 a 2 ; 2′ 8″ deep.
662	„ .	Statuette, over-tall female figure, ht. 6¼″, wide 1¾″. *Found* B′ 7 c 1 ; 3′ deep.
663	„ .	Mould. *Found* W 17 b 4 ; 4′ 3″ deep.
664	Pottery .	Earthen jar, ht. 2½″, diam. 2½″, opening 1″. *Found* A′ 9 d 3 ; 3′ 3″ deep.
665	„ .	Dish, broad flat edge, rounded bottom, ht. 2″, diam. 5¼″. A′ 9 a 4 ; 3′ 3″ deep.
666	„ .	Earthen jar, ht. 3¼″, diam. 3¼″, across base 1¾″, opening 1½″. *Found* A′ 9 b 1 ; 3′ 2″ deep.
667	„ .	Earthen jar, ht. 2″, diam. 1¾″, opening 1¾″. *Found* A′ 9 b 1 ; 3′ 3″ deep.
668-670	Seals .	See special List of Seals.
671	Misc. . .	Signet, circular face, diam. 1⅓″. Device Kalaśa ? *Found* W 17 c 1 ; 3′ deep.

No.	Class.	Description, Findspot, etc.
672	Seal . .	See special List of Seals.
673	Bead . .	Amethyst, $1\frac{1}{4}''$ long, barrel shaped, pierced lengthwise. *Found* U 21 b 4; 3′ 6″ deep.
674	Terracotta .	Elephant, ht. $2\frac{1}{4}''$, length $2\frac{1}{2}''$. *Found* Z 11 a 3; 3′ 10″ deep.
675	Pottery .	Vessel, circular, with rounded bottom and very wide edge, ht. 3″, diam. $6\frac{1}{4}''$, opening of the central vessel $2\frac{1}{2}''$. *Found* Z 11 a 3; 3′ 10″ deep.
676	,, .	Earthen jar, ht. 2″, diam. $1\frac{3}{4}''$, opening $1\frac{1}{4}''$. The sides show a band of circular depressions pierced each with one small hole. *Found* A′ 9 b 1; 3′ 3″ deep.
677	Terracotta .	Mould, rectangular, length $2\frac{1}{2}''$, width $1\frac{1}{4}''$. One face has the device of twin fishes. The other face, star-like flower with stalk and leaves. *Found* C′ 46 a 3; 6′ deep.
678	,, .	Triangular slab, used as a mould, 5″×5″×$3\frac{5}{8}''$ a side. *Found* W 17 a 2; 4′ 6″ deep.
679	Pottery .	Earthen bowl with narrow rim, ht. 3″, diam. $6\frac{1}{2}''$. *Found* Y 13 b 3; 4′ 3″ deep.
680	,, .	Earthen dish with circular projection in centre. Measures ht. 2″, diam. $4\frac{3}{4}''$. *Found* Y 13 b 3; 4′ 3″ deep.
681	,, .	Earthen bowl, ht. 3″, across base $1\frac{7}{8}''$, across top $6\frac{1}{4}''$. *Found* Y 13 b 3; 4′ 3″ deep.
682	,, .	Four earthen cups, over, diam. $4\frac{1}{2}''$. *Found* Y 13 d 4; 4′ 6″ deep.
683	,, .	Earthen bowl, edge broken off, ht. 3″, diam. $5\frac{3}{4}''$. *Found* Y 13 d 4; 4′ 6″ deep.
684-685	Seals . .	See special List of Seals.
686	Terracotta .	Elephant, legs pierced for wheel, $4\frac{1}{2}''$ long, $3\frac{1}{4}''$ high. *Found* U 21 a 4, 3′ 6″ deep.
687	Pottery .	Earthen bowl, ht. $5\frac{1}{2}''$, diam. 8″, opening $4\frac{1}{4}''$. *Found* Y 13 d 2; 4′ 5″ deep.
688	Wheel . .	Terracotta wheel, broken, diam. $3\frac{1}{2}''$, through hub $1\frac{1}{4}''$. *Found* C′ 46 a 1; 8′ 2″ deep.
689	Pottery .	Earthen jar, ht. 2″, diam. 2″, opening $\frac{5}{8}''$. *Found* C′ 46 a 3; 7′ 6″ deep.
690	Terracotta .	Head, ht. $5\frac{1}{4}''$ by $3\frac{1}{2}''$. *Found* C′ 5 d 4; 3′ 4″ deep.
691	,, .	Makara's head, length $1\frac{5}{8}''$. *Found* C′ 5 d 4; 3′ 3″ deep.
692	Pottery .	Earthen jar, ht. 2″, diam. 2″, opening $\frac{5}{8}''$. *Found* C′ 5 d 4; 3′ 4″ deep.
693	Terracotta .	Head, very crude, broken, ht. 3″ by 2″ wide. *Found* X 15 d 2; 3′ 9″ deep.

No.	Class.	Description, Findspot, etc.
694	Pottery .	Earthen bowl, ht. 2″, diam. 3½″, opening 2¼″. *Found* W 17 c 4 : 5′ deep.
695	„ .	Earthen jar, ht. 7″, diam. 5¼″, opening 3¼″. *Found* C′ 47 a 4 ; 10′ 6″ deep.
696	„ .	Four cups, average diam. 4″. *Found* Y 13 d 3 ; 5′ deep.
697	Bead . .	Blue glass, in facets. *Found* Y 13 d 3 ; 5′ deep.
698	Wheel . .	Terracotta wheel, plain style, diam. 3½″, through hub 1½″. *Found* Y 13 d 3 ; 5′ deep.
699	Pottery .	Earthen jar, ht. 2½″, diam. 2¼″, opening ⅞″. *Found* C′ 46 a 3 ; 7′ deep.
700	Terracotta .	Figurine, lower part of a tall slender female figure standing on a lotus. Excellent style. Ht. of fragment 5¼″, width 2″. *Found* U 21 d 1 ; 4′ 5″ deep.
701	Coin . .	Copper coin, Kadphises II, *cf.* Smith's Cat. Ind. Mus., Pl. XI, No. 7. *Found* S 25 b 1 ; 5′ 6″ deep.
702	Terracotta .	Terracotta head, of excellent style, ht. 1¼″. *Found* S 25 a 4 ; 5′ 10″ deep.
703	Misc. . .	Signet, square, stone, (dark gray) with decorated sides. Device large Kalaśa with foliage, no legend. Diam. of face 1⅛″, ht. 1¼″. *Found* S 25 a 4 ; 5′ 10″ deep.
704	Pottery .	Earthen jar, ht. 5″, diam. 4½″, opening 3¼″. *Found* B′ 7 b 2 ; 3′ deep.
705	„ .	Earthen jar, ht. 3″, diam. 3¼″, opening 1½″. *Found* Z 11 a 2 ; 4′ 4″ deep.
706	Seal . .	See special List of Seals.
707	Terracotta .	Terracotta head, ht. 4½″, width 3″. *Found* C′ 5 c 1 ; 3′ 4″ deep.
708-711	Seals . .	See special List of Seals.
712	Bead . .	Translucent yellowish white, flattened barrel. *Found* U 21 a 4 ; 4′ deep.
713	Seal . .	See special List of Seals.
714	Terracotta .	Mould, circular, clay, surface concave, device fine petals about a central calyx with stamens, all in high relief on the die ; ornamental edge, diam. 1″. *Found* S 25 a 4 ; 6′ deep.
715	Misc. . .	Clay amulet. *Found* C′ 5 c 2 ; 3′ 6″ deep.
716	Terracotta .	Inscribed token, diam. ⅝″. Device — 'Sankha above, swastika below. Legend *ki. . .jika* (*sya*). *Found* W 17 a 1 ; 4′ deep.
717	„ .	Terracotta head, wearing pointed cap, ht. 4½″, width 2¾″. *Found* Z 11 c 3 ; 4′ 10″ deep.
718-719	Seals . .	See special List of Seals.
720	Bead . .	Round reddish brown, spotted with white. *Found* Z 11 c 3 ; 4′ 10″ deep.

No.	Class.	Description, Findspot, etc.
721	Terracotta .	Terracotta head with peculiar threefold headdress or coiffure, ht. 2½". *Found* A' 43 b 4 ; 11' deep.
722-723	Seal . .	See special List of Seals.
724	Pottery .	Earthen jar, ht. 3½", diam. 3½", across opening 2". *Found* B' 7 c 2 ; 6' 3" deep.
725	„ .	Earthen jar, ht. 3", diam. 2¾", opening 2". *Found* B' 7 c 2 ; 6' 7" deep.
726	„ .	Fragment, hour-glass shaped, ht. 2½". *Found* B' 7 c 2 ; 7' deep.
727	„ .	Four cups, average diam. 3¾". *Found* B' 7 c 2 ; 7' deep.
728	Wheel . .	*Terracotta wheel, plain style, diam. 3½", through hub 1½". Found* W 17 c 1 ; 4' deep.
729	Pottery .	Four cups, average diam. 3¾". *Found* W 17 d 1 , 4' deep.
730-731	Seal . .	See special List of Seals.
734	Bead . .	Crystal bead, barrel-shaped, no facets, pierced lengthwise. *Found* W 17 a 2 ; 4' 6" deep.
735	Pottery .	Earthen bowl, ht. 3½", diam. 5", opening 5". *Found* B' 7 c 2 ; 8' deep (inside well).
736	„ .	Thirteen cups, aver. diam. 3¾". *Found* B' 7 c 2 ; 8' deep (inside well).
737	„ .	Three cups, aver. diam: 4¾". *Found* B' 7 c 2 ; 8' 5" deep (inside well).
738	„ .	Sixteen cups, aver. diam. 4". *Found* B' 7 c 2 ; 9' deep (inside well).
739	Terracotta .	Square plaque subdivided on both sides in 16 small squares with marks. 1¾" sq. *Found* C' 47 c 3 ; 4' 6" deep.
740	„ .	Clay mould, square area, 1½", device, two kneeling figures. *Found* W 17 a 2 ; 5' 3" deep.
741	„ .	Fragment, being the handle of some vessel showing head and breast of female. Excellent style. *Found* X 15 c 1; 5' deep.
742	„ .	Terracotta head (crude style), ht. 3½", width 3¼". *Found* X 15 a 2 ; 5' 3" deep.
743	Misc. . .	Iron axe head, very small. *Found* B' 42 c 1 ; 14' deep.
744	Pottery .	Lid, circular (diam. 2½"), fine texture with brilliant black slip. *Found* B' 42 c 1 ; 14' deep.
745	„ .	Fragment, ht. 2¼", perhaps the stand of a lamp. *Found* C' 43 c 2 ; 2' deep.
746	Terracotta .	Fragment head and breast of female with elaborate ornaments, ht. 2¾", width 2¼". *Found* C' 44 a 2 ; 2' 3" deep.

No.	Class.	Description, Findspot, etc.
747	Terracotta .	Terracotta head (very coarse); ht. 3¾", width 3". *Found* Z 11 c 4; 5' deep.
748	Pottery .	Earthen jar, ht. 3½", diam. 3½", opening 2". *Found* C' 47 c 3; 5' deep.
749	,, .	Earthen *sorahi*, ht. 9¼", diam. 5¼", length of neck 3", across opening 1½". *Found* W 17 a 2; 5' deep.
750	Terracotta .	Terracotta head (very coarse), ht. 5", width 2¼". *Found* Y 13 b 2; 5' 3" deep.
751	Pottery .	Earthen jar, ht. 5½", diam. 6", opening 3". *Found* C' 47 c 3; 5' 3" deep.
752 753	Seals . .	See special List of Seals.
754	Terracotta .	Chirag, on stand, total ht. 3". *Found* Z 11 b 2; 4' 6" deep.
755	Pottery .	Three cups, aver. diam. 4". *Found* S 25 b 3; 6' deep.
756	,, .	Clay ear stud, with fluted edge. *Found* W 17 a 4; 5' 3" deep.
757	Terracotta .	Terracotta head, with pointed cap, ht. 2¼", width 2". *Found* Z 11 c 3; 5' deep.
758	,, .	Statuette (legs missing), of a female, now ht. 5", width 2¼". *Found* S 25 a 4; 6' 3" deep.
759- 760	Seals . .	See special List of Seals.
761	Stone . .	Fragment of a stone mould. *Found* C' 43 a 4; 2' 6" deep.
762	Pottery .	Earthen bowl, ht. 3", diam. 6", across base 2⅞". *Found* X 15 a 2; 5' 6" deep.
763	,, .	Two cups, average diam. 4½". *Found* X 15 a 2; 5' 6" deep.
764	Seal .	See special List of Seals.
765	Pottery .	Earthen jar, ht. 6", diam. 6½", opening 3½". *Found* Z 11 c 1; 6' deep.
766	,, .	Earthen bowl, ht. 2", diam. 5¼". *Found* Z 11 c 1; 6' deep.
767	,, .	Nine cups, average diam. 4". *Found* Z 11 c 1; 6' 3" deep.
768- 771	Seals . .	See special List of Seals.
772	Bead . .	Crystal bead, round, flat one side. *Found* W 17 b 2; 6' 6" deep.
773	Terracotta .	Statuette, head and shoulders only, 2"×1". *Found* Y 13 a 4; 6' 3" deep.
774	Pottery .	Earthen cover, diam. 4¾". *Found* Z 11 c 2; 6' 5" deep.
775	,, .	Seven cups, average diam. 4". *Found* Y 13 a 4; 7' 6" deep.

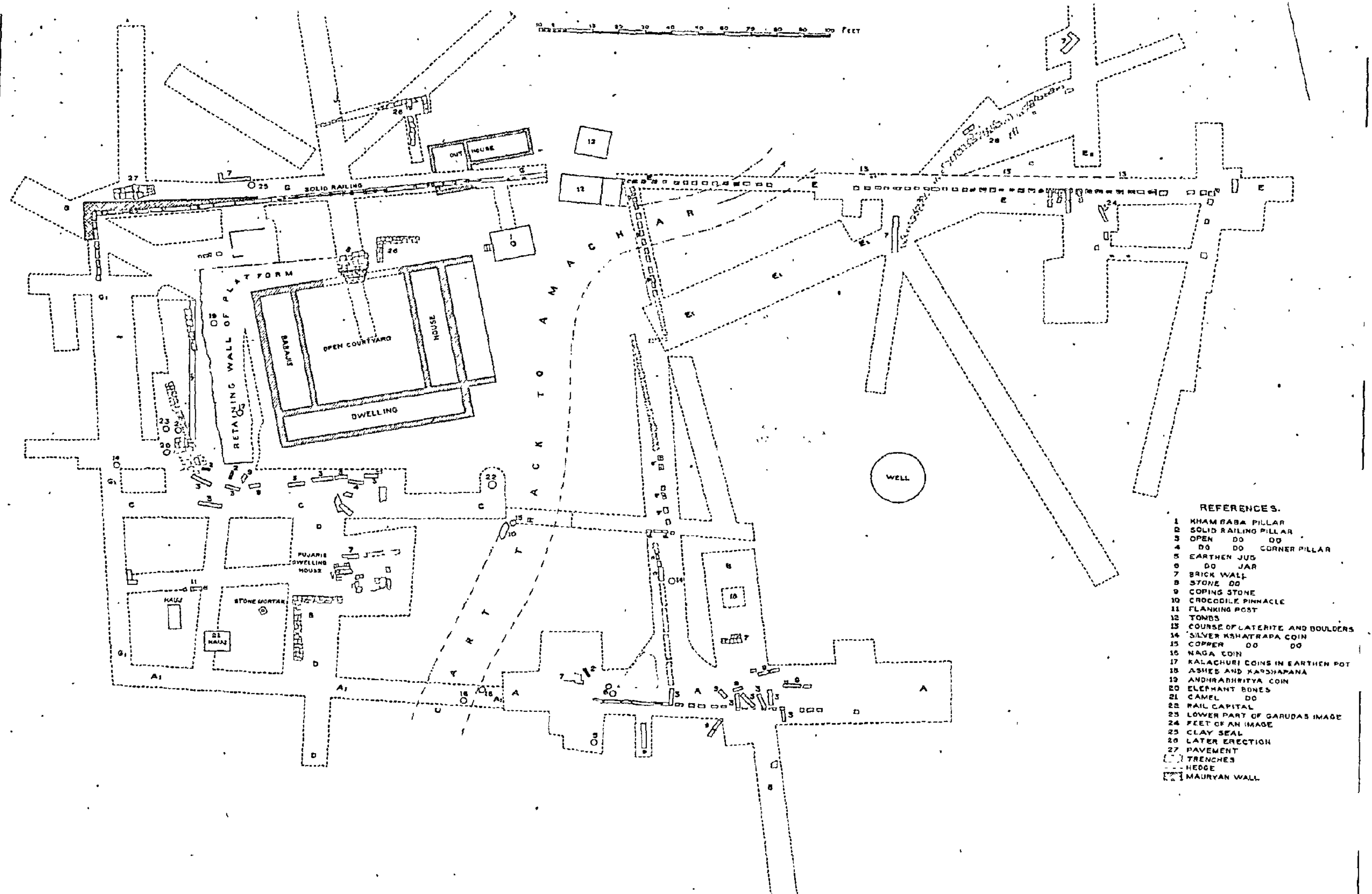
No.	Class.	Description, Findspot, etc.
776	Seal . .	See special List of Seals.
777	Pottery .	Six cups, aver. diam. 3½″. *Found* W 17 b 4 ; 6′ 6″ deep.
778-779	Seals . .	See special List of Seals.
780	Bead . .	Long, flat, glass, of greenish yellow hue. *Found* X 15 b 2 ; 6′ deep.
781	Pottery .	Earthen jar, ht. 4″, diam. 4¼″, opening 1½″. *Found* Y 13 a 2 ; 6′ 9″ deep.
782	Bead . .	Two carnelian beads, banded with white. *Found* A 15 c 1 ; 6′ 3″ deep.
783	Pottery .	One earthen cup, diam. 3½″. *Found* W 17 d 2 ; 6′ deep.
784	" .	Four cups, average diam. 3½″. *Found* X 15 d 1 ; 6′ 3″ deep.
785	" .	Earthen jar, ht. 2½″, diam. 2½″, opening 1″. *Found* B′ 7 d 2 ; 5′ deep.
786	Bead . .	Clay bead or amulet. *Found* X 15 d 2 ; 6′ 3″ deep.
787	Pottery .	Earthen pot, with spout, ht. 4″, diam. 4″, opening 2½″. *Found* B′ 7 c 1 ; 5′ deep.
788	" .	Earthen cup, diam. 4″. *Found* B′ 7 c 3 ; 5′ 3″ deep.
789	" .	Earthen cup, diam. 6¾″. *Found* B′ 7 c 3 ; 5′ 3″ deep.
790	Bead . .	Blue bead. *Found* A′ 9 b 1 ; 5′ 6″ deep.
791	Pottery .	Earthen jar, ht. 3″, diam. 3″, opening 1¼″. *Found* Z 11 a 4 ; 6′ deep.
792	" .	Six cups, average diam. 3½″. *Found* X 15 a 4 ; 6′ 3″ deep.
793	" .	Two cups, average diam. 3½″. *Found* B′ 7 a 4 ; 5′ deep.
794	Misc. . .	Ear stud ; bone. *Found* A′ 9 b 2 ; 6′ deep.
795	Bead . .	Carnelian bead, barrel-shaped, pierced lengthwise. *Found* T 23 a 2 ; 5′ 6″ deep.
796	" . .	White quartz, cut in facets, pierced lengthwise. *Found* X 15 a 3 ; 6′ deep.
797	" . .	Two beads, round, black, banded with white. *Found* Z 11 c 1 ; 6′ 3″ deep.
798	Seal . .	See special List of Seals.
799	Stone . .	A stone lid, circular, diam. 3″. *Found* W 17 c 2 ; 6′ 3″ deep.
800	Seal . .	See special List of Seals.
801	Pottery .	Two cups, diam. 5″. *Found* Z 11 c 4 ; 6′ 2″ deep.
802	Brick .	Carved brick mould, with oblique parallel grooves, every third one notched. On reverse rude incised figures, star, flower, etc. Measures 3½″ by 3″ by ½″ thick. *Found* W 17 b 4 ; 6′ 2″ deep.

No.	Class.	Description, Findspot, etc.
803	Pottery .	Earthen bowl, diam. 7¼″. *Found* Y 13 b 3 ; 7′ 3″ deep.
804	Seal . .	See special List of Seals.
805	Pottery .	One cup, diam. 2¼″. *Found* Y 13 d 2 ; 7′ 4″ deep.
806	,, .	Earthen jar, ht. 3¼″, diam. 3¾″, opening 1″. *Found* Y 13 d 2 ; 7′ 6″ deep.
807	Stone . .	A stone cup, circular, with two handles, diam. of opening 1¼″, diam. across handles 2¼″. *Found* W 17 a 3 ; 6′ 4″ deep.
808	Seal . .	See special List of Seals.
809	Pottery .	Three cups, average diam. 3½″. *Found* B′ 7 b 4 ; 6′ deep.
810-811	Seals . .	See special List of Seals.
812	Pottery .	Clay mould, small fragment only, unrecognizable. *Found* Z 11 a 2 ; 6′ 6″ deep.
813	,, .	Clay bird, (cock ?) hollow, 3″ long, 3″ high. *Found* Y 13 b 3 ; 7′ 6″ deep.
814	,, .	One cup, diam. 6¾″. *Found* Y 13 b 3 ; 7′ 6″ deep.
815	Bead . .	Pink, opaque save for one narrow translucent band running through centre ; round. *Found* S 25 a 4 ; 11′ 4″ deep.
816	,, . .	Greenish, white, rectangular, flat, with long edges bevelled, pierced lengthwise. *Found* Z 11 a 2 ; 6′ 6″ deep.
817	Pottery .	Earthen jar, ht. 2½″, diam. 4¼″, opening 1¾″. *Found* B′ 7 b 2 ; 6′ 3″ deep.
818	,, .	Four cups, average diam. 4¼″. *Found* A′ 9 b 1 ; 6′ deep.
819	,, .	Earthen jar, ht. 3½″, diam. 4½″, across opening 3¾″. *Found* B′ 7 b 2 ; 6′ 3″ deep.
820	,, .	Small earthen jar, measuring ht. 1¾″, diam. 2¾″, across opening 1¼″, containing 82 small beads of great variety, the majority resembling pink coral, and also two large silver Muhammadan coins, both alike. *Found* A 44 b 4 ; 7′ 3″ deep.
821	Seal . .	See special List of Seals.
822	Pottery .	Earthen jar, ht. 2¼″, diam. 2½″, opening 1¼″. *Found* Z 11 b 1 ; 6′ 9″ deep.
823	Seal . .	See special List of Seals.
824	Pottery .	Two cups, diam. 4½″. *Found* W 17 a 2 ; 7′ deep.
825-826	Seals .	See special List of Seals.

EXCAVATIONS AT BESNAGAR.

BESNAGAR, or Beś as it is popularly known, is 2 miles north-west of Bhilsā, the head-quarters of the district of the same name, in Gwalior State, and an important station on the Great Indian Peninsula Railway. The old town is situated in the fork between the converging rivers Betwā and Beś. Its ruins, however, are not confined to these boundaries, but have spread at least two-thirds of a mile north of the river Beś. Nearly thirty-five years ago, when Sir Alexander Cunningham visited Besnagar, he had marked out several mounds amid this vast expanse of ruins as worthy of exploration, none of which, however, he himself was able to open. But what Cunningham was not in a position to undertake was carried out in the cold season of 1910 by Mr. H. H. Lake, Superintending Engineer of the Gwalior State, under instructions from His Highness the Mahārājā Scindia. An account of his excavations has been printed in the *Journal of the Bombay Asiatic Society*, Vol. XXIII, pp. 135-146. Most of the mounds dug into by him proved barren, and the excavation of the rest, though it was not quite as thorough and scientific as was desirable, at any rate conclusively showed that they did not contain remains of a period earlier than the Gupta. No exploration work was afterwards undertaken amidst the ruins of Besnagar till the close of 1913. During this year His Highness the Mahārājā Scindia created an Archæological Department in his State and gave instructions for the new Department to make the exploration of promising sites one of its foremost duties. Accordingly, at the suggestion of the Director General, the excavation of Besnagar was resumed and its direction placed in my hands. On the advice of Sir John Marshall I selected the site on which stands a pillar called Khām Bābā, not far from the junction of the two rivers (Plate LII, *a*). The reason for this selection was that there was an inscription engraved on this pillar, which was first brought to the notice of archæologists by the Director General himself.[1] It records the erection of a *Garuḍa-dhvaja*, *i.e.*, a column surmounted by Garuḍa, in honour of the god Vāsudeva by Heliodora (Heliodoros), son of Diya (Dion). He is therein spoken of as a Bhāgavata, *i.e.*, worshipper of Bhagavat (Vāsudeva) and a resident of Takhasilā (Taxila). He had come there as an envoy from the Indo-Bactrian king Aṁtalikita (Antialkidas) to the court of the local prince Bhāgabhadra. All these names are foreign to us except that of Antialkidas, who was known to antiquarians

[1] *Jour. R. As. Soc.*, for 1909, p. 1053 and ff. For the number of the scholars who have edited this inscription, *vide* Lüders' List No. 669 (pp. 63 and 176).


REFERENCES.
1 KHAM BABA PILLAR
2 SOLID RAILING PILLAR
3 OPEN DO DO
4 DO DO CORNER PILLAR
5 EARTHEN JUG
6 DO JAR
7 BRICK WALL
8 STONE DO
9 COPING STONE
10 CROCODILE PINNACLE
11 FLANKING POST
12 TOMBS
13 COURSE OF LATERITE AND BOULDERS
14 SILVER KSHATRAPA COIN
15 COPPER DO DO
16 NAGA COIN
17 KALACHURI COINS IN EARTHEN POT
18 ASHES AND KARSHAPANA
19 ANDHRABHRITYA COIN
20 ELEPHANT BONES
21 CAMEL DO
22 RAIL CAPITAL
23 LOWER PART OF GARUDAS IMAGE
24 FEET OF AN IMAGE
25 CLAY SEAL
26 LATER ERECTION
27 PAVEMENT
TRENCHES
HEDGE
MAURYAN WALL
FEET
WELL
SOLID RAILING
OUT HOUSE
RETAINING WALL OF PLATFORM
BABAJIS
OPEN COURTYARD
HOUSE
DWELLING
PUJARIS DWELLING HOUSE
STONE MORTAR
HAUJ
TRACK TO AMACHAR

from his coins found on the frontiers long before the inscription was discovered. Here then was indicated a definite site, *viz.*, that of the temple of Vāsudeva, and also a more or less definite date, *viz.*, 140 B. C., which is the latest date ascribed to Antialkidas by numismatists.[1] There was thus every likelihood of our finding here the remains of what might prove to be the earliest structure of Vāsudeva religion, and also some materials of the Śuṅga age, about which our knowledge is still very scanty.

From his article referred to above it appears that Mr. Lake also excavated on this site. But he seems to have done nothing beyond cutting two trenches and then refilling them, and in any case his excavations threw no light on the important shrine of Vāsudeva which, in the middle of the second century B. C., was so renowned and regarded with such veneration that even a Greek Ambassador set up a costly Garuḍa pillar in honour of the deity. A systematic excavation of the site was still, therefore, a desideratum.

Before beginning the account, however, of what I was able to accomplish, it behoves me to give some description of the pillar and of the antiquarian objects which were lying on the ground in the vicinity. The column called Khām Bābā and the ground round about it are the property of a *pujārī* of the Śaiva sect named Pratāp-purī Gosāī popularly known as Bābājī. The whole land, I was told, measures 5 *bighas*, and this the Bābājī holds as *inām* from the Gwalior Durbar. He represents the third generation from the original Bābā, with whom the worship of the pillar originated. The name of the Bābā was Hirāpurī, whose pupil was Chandanpurī, the *guru* of the present Bābājī. Chandanpurī, like the present Bābājī, was a *girast*, *i.e.*, a householder, but Hirāpurī was an ascetic, whose only duty, it is said, consisted in preparing wine and offering it to Khām Bābā. Once on a time before this worship began, a personage of high distinction came with an army to the place where Hirāpurī lived. The latter requested the former to abide with him for all time, and the visitor was so charmed with the hospitality of the Bābā that he acceded to his wish and transformed himself into the Khām Bābā. Such is the legend narrated to me by Bābājī. The column, generally speaking, is a favourite divinity with the Bhoïs or Dhimars, who believe that Khām Bābā was originally of their caste. As evidence of their contention they point to the crocodile capital near the south-east corner of Bābājī's house, which, they say, was a *machhli* or fish captured by the original Dhimar before he assumed the lithic form and became Khām Bābā. The *makara* also, it is said, was transformed into stone along with him. Though the Bhoïs are the most frequent worshippers of this deity, people of higher castes, such as Raghbansis and even Brāhmaṇs, also come here occasionally for worship. Nearly forty years ago a local Jāgīrdār named Harisingh, a Chandel Rajpūt, is said to have offered his *chuṭia* or lock of hair to Khām Bābā, because his father died soon after he was born—and did not live to do it. The Rajpūt offered $1\frac{1}{4}$ seer of red-lead, $1\frac{1}{4}$ seer of oil, seven rams and seven bottles of a local liquor called *phul*, an incident which is still fresh in the memory of the present Bābājī. The first two ingredients were mixed, and the column was

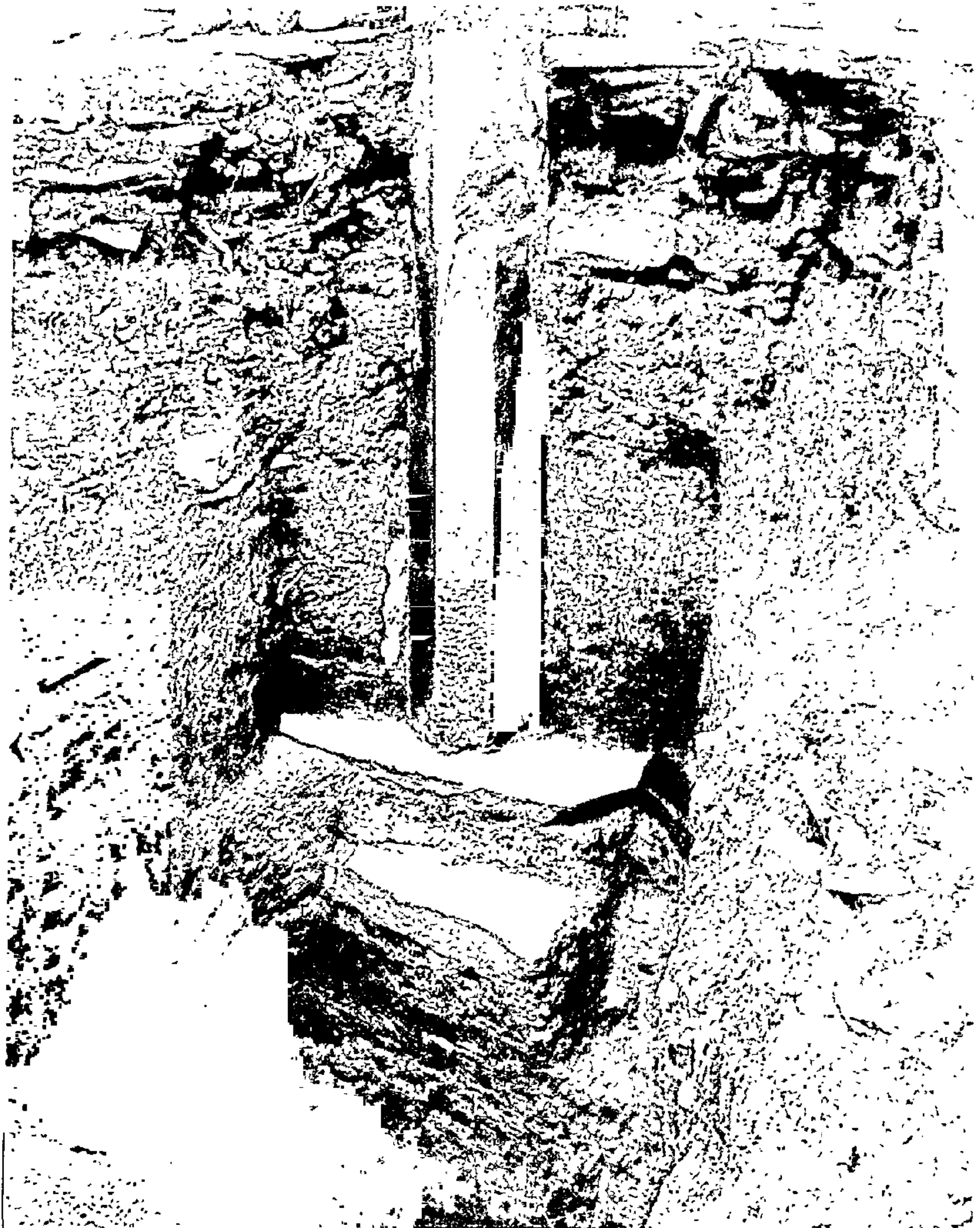
[1] Some numismatists, including Mr. V. A. Smith, place him about B. C. 172 (*Catalogue of the coins in the Indian Museum*, Vol. I, p. 5) and others with Mr. Percy Gardner about B. C. 143 (*British Museum Catalogue of Greek and Scythic Kings of India*, Intro., p. XXXIII).

besmeared with the paint so formed. This is an offering of which th divinity is inordinately fond, and every worshipper, no matter if he has no money to make other presents, must at least make this offering and bedaub the pillar. Khām Bābā is thus covered with coat after coat of this vermilion paint, which; with the lapse of time, alls away in scales. Another favourite offering of the deity is liquor, which those who can afford it must offer. As I was carrying out digging work round about Khām Bābā Bābājī pressed me daily to make an offering and appease the angry deity, and he would not desist until he had extorted from me a bottle of whisky, which, being superior to the country liquor, he declared was sure to pacify the divinity. Khām Bābā is believed to be such a beneficent deity that it can grant all boons, but people come here to make vows particularly for obtaining a son. The deity is so widely known that Dhimars even from Chandpurā Bāḍī near the Narmadā come to worship and have raised *chabutras* in honour of this god at their villages.

In order to make a careful inspection of the shaft and capital of the column I had to have it cleared of all its red-lead daubings. Bābājī raised no objection to my doing so, especially as he had allowed the Director General four years previously to remove a portion of it. On that occasion, however, it was a comparatively simple matter as layers upon layers of red-lead, continued for a number of years, had already led to its flanking off. But it took me no less than ten days to scrape off the paint, and there was little to reward my pains when it was done. The surface of the column is relatively rough, without any of the polish which characterises Aśoka pillars. The pillar, as it stands, rises from a platform 15′ 7″ long, 11′ 10″ broad and 3′ 2″ high, and is said to have been built in the time of the Bābā who started the worship of Khām Bābā (Plate LIII). It is of quartzitic sandstone of the Vindhyan system and of pinkish brown colour. It tapers towards the top and consists of two parts, *viz.*, the shaft and the capital each of which is a monolith. The lowest section of the shaft, which is now visible, is 4′ 11″ high, and octagonal. Six faces of the octagon are each 7″ wide, one is $6\frac{1}{2}$″ and one $6\frac{9}{16}$″ wide. Each of these faces is adorned with a half lotus design within an arched border and a bunch of petals between (*Ibid.* E). Below the line of lotuses are two inscriptions, the longer and more important of which has been referred to above. This faces the east and the other the west, but each occupies only three sides of the octagon. The second part of the shaft has sixteen sides, the lower varying from $2\frac{7}{8}$″ to $3\frac{13}{16}$″ in width. The top is decorated with an ornamental festoon, consisting of three strands suspended on eight brackets and in each of the eight swags is a fruit or flower. The latter are more or less weather-worn, and consequently it is not possible to identify most of them. Of the fruits the custard-apple, mango and brinjal can be easily recognised, but of the flowers the lotus alone can be identified. The next section of $11\frac{1}{2}$″ has thirty-two sides with a width varying at the bottom from $1\frac{1}{2}$″ to $1\frac{3}{4}$″ and each tapering to a point at the top (*Ibid.* C). Above it comes the uppermost section of the shaft which is circular, and is 2′ $1\frac{1}{2}$″ in height. On the north side of this and the lower section there must have been a flaw, and the shape is not uniform. The capital is adorned with curved ribs with petals at the top, and its underside decorated with three concentric rings, its height being 2′ 6″ and its diameter 2′ 8″ (*Ibid.* B). The junction between the capital and the abacus above is marked by a cable necking with a diameter of 1′ $4\frac{1}{2}$″. The abacus is divided into three compartments, the two lower ones



a. Kham Baba pillar, from west.

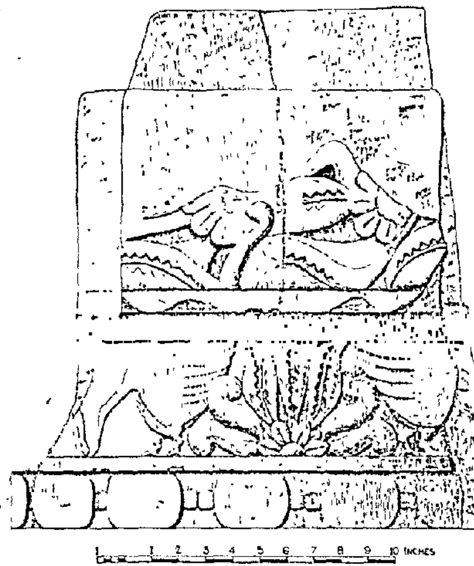


b. Foundations of Kham Baba.

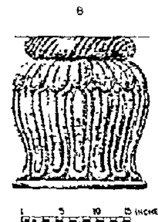
EXCAVATIONS AT BESNAGAR.

DETAILS OF COLUMN ENLARGED

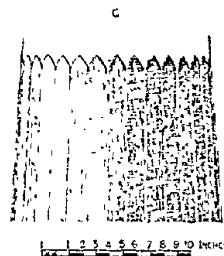
A



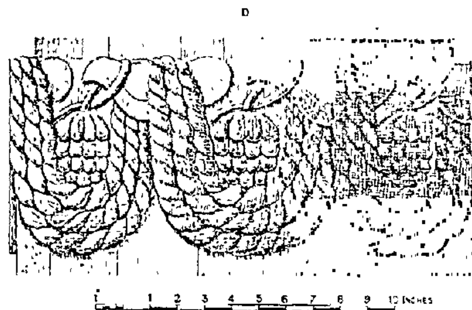
B



C

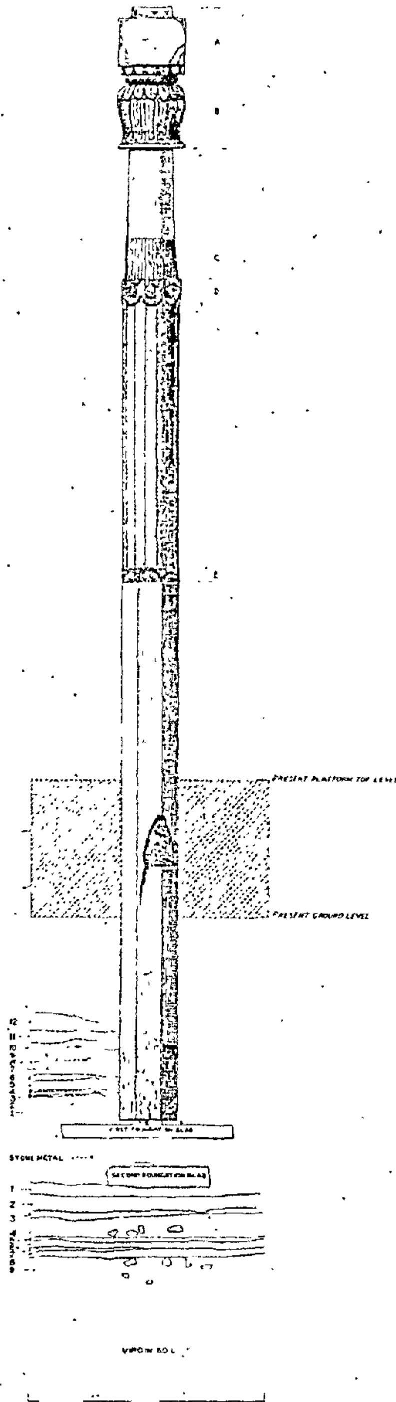


D



E





ELEVATION OF COLUMN NORTH SIDE SHOWING FOUNDATION LAYERS BELOW IN SECTION

1 2 3 4 5 6 7 8 9 10 FEET

KHAM BABA PILLAR AND ITS DETAILS.

round and the upper rectangular, the lowest adorned with a bead and reel moulding. The carved surface of the abacus is much broken, but from what little is preserved it appears that the central band was adorned with a design of pairs of geese feeding with their long necks stretched down to the ground and confronting each other, with a honeysuckle pattern beween each pair (*Ibid.*, A). The uppermost was decorated with a design, apparently of lotus flowers with petals and stalks in conventional curves. The abacus ends in a projecting tenon tapering at the top. Part of this tenon at the north has been destroyed, and a crack is noticeable on its top surface which continues almost to the bottom of the abacus on the west. This probably was caused by lightning which seems accountable also for the destruction of the bas-relief carving on the sides of the abacus.

The drawing of the Khām Bābā pillar, which is given on Plate XIV of Cunningham's *Archæological Survey Reports*, Vol. X, is faulty in many ways. The half lotus design which tops the octagonal section of the shaft, has not been shown, and the festoon design, which crowns the sixteen-sided portion, has been replaced by a full lotus design. The thirty-two sides, into which the column afterwards changes, have not been indicated at all. The abacus is drawn without its bas-reliefs and is misleading even in the block outline. The abacus is represented by Cunningham as surmounted by a fan-palm sculpture. This sculpture was no doubt lying below on the platform of the Khām Bābā when Cunningham visited Besnagar. This and the fact that the dimensions of the lower part of the fan-palm very nearly agree with those of the top surface of the abacus most probably led Cunningham into the belief that the former crowned the latter. But, as stated above, on the top of the abacus is a tenon which is distinct and unmistakable, and there is no mortice below the fan-palm. In fact, the fan-palm appears to have surmounted a shaft and formed an integral part of it. Moreover, the inscription on Khām Bābā tells us that it was a Garuḍa standard, and one would naturally expect, not a fan-palm, but a figure of Garuḍa to crown it.

There was another palm leaf capital on this site. It was not, however, near the one just referred to, *i.e.*, on the platform of Khām Bābā, but near the south-east corner of Bābājī's house. Both the fan-palms were removed by Mr. Lake to the Besnagar Museum. Near the second fan-palm were lying and are still lying two sculptures, which cannot be chronologically far removed from Khām Bābā itself. One of these is a rail capital (Plate LIV, *a*). The bell, which forms the lowermost part, is $2' 2\frac{3}{4}''$ in height. The upper half of the bell is very much battered and injured. Above is a cable necking, which divided the bell from the abacus. The latter is $9\frac{1}{4}''$ high, and is circular in shape. It is divided into two compartments, the lower of which is occupied by the bead and reel ornament, and the upper with honeysuckle patterns alternating with crocodiles. On the abacus is a rail moulding $2' 3\frac{1}{4}''$ square and $1' \frac{1}{2}''$ high, and above it comes another member in the form of an *āmalaka*. It is $1' 1\frac{3}{8}''$ high thus bringing the total height of the whole capital to $4' 10''$, excluding the tenon at the top, which is $7\frac{1}{2}''$ long, $5\frac{1}{4}''$ broad, and $6''$ high. This tenon seems to have been fitted into the mortise of the soffit of the *makara* pinnacle, the other sculpture lying beside it (Plate LIV, *b*). The mortise is $9''$ long, $6\frac{1}{4}''$ broad, and $8''$ deep. This no doubt appears to be a little too large for the tenon of the rail-capital, and militates, according to Mr. Lake, against the above supposition. But in early

Indian architecture the mortise holes were frequently much larger than the tenons, and Sir John Marshall assures me that he has met with many similar instances at Sānchī. This crocodile again bears such a close resemblance to the similar animals figured on the edge of the abacus of the rail capital, that their connection can scarcely be seriously called in question. I, therefore, quite agree with Cunningham in holding that it was the pinnacle of this capital. The greatest height of the *makara* is 2′ 7½″; but the tail is broken, and if we judge by the proportions of these animals on the rail capital its original height must have been about two feet more. Cunningham says:—"There is a mysterious hole at a short distance behind the eye which has puzzled me very much. Perhaps a horn or a fin, which the sculptor had forgotten, was inserted here as an after-thought." There is not one hole, but two holes, one behind each eye, and it seems more likely that they served as mortises for holding the tenons of the crowning piece. In this connection interest attaches to the stump of a column which was lying uncared for in one of the narrow streets of Bhilsā and for the preservation of which we are indebted to Mr. Lake.[1] It is now lying in the Besnagar Museum. Originally it formed the lower part of a pillar shaft. It is 1′ 10″ in diameter, with eight sides changing to sixteen. A short inscription has been engraved on seven sides of the octagon, but has been effaced on one of them. What remains is also not well-preserved, though with a little effort it can be read with certainty. Dr. A. Venis' transcript of it, published by Mr. Lake, which is accurate and quite correct, is as follows:

1 [2]*Gotama(ī?)putena*
2 *Bhāgavatena*
3 (effaced)
4 [*Bha*] *gavato prāsādota-*
5 *masa Garuḍa-dhvaj*[.] *kāri*[*t.*]
6 [*dvā*]*dasa-vas-ābhisit*[*e*]
7 ...*Bhāgavate mahārāje.*

The translation given by Dr. Venis is, I suggest, not correct. My translation runs thus:

"Bhāgavata, son of Gotamī, caused a Garuḍa standard to be made in connection with the best temple of Bhagavat (Vāsudeva) when Mahārāja Bhāgavata had been crowned twelve years."

I have no doubt that Bhāgavata here does not mean a follower of Bhagavat, as Dr. Venis takes it, but is a proper name, and that the king referred to must be the prince of that name, the last but one of the Śuṅga family, mentioned in the Purāṇas. It can hardly be questioned that the column, of which the stump formed part, belonged to this site. It is quite reasonable to assume that in such a famous city as Vidiśā there were several temples of Vāsudeva. But it is unlikely that Heliodorus, coming as he did from Taxila, would have erected a *Garuḍa-dhvaja* at any temple except the most famous one. The word *prāsādottama*, again, which occurs in the inscription on the stump discovered by Mr. Lake, shows that the *Garuḍa-dhvaja* mentioned in this record also

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[1] *Jour. Bom. As. Soc.*, Vol. XXIII, p. 144.

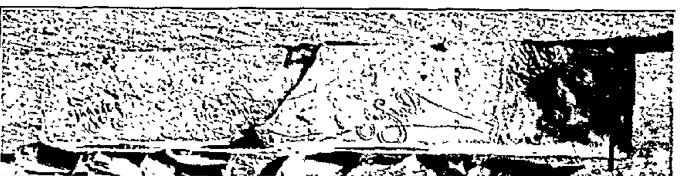
[2] Read from the original stone.



a. RAIL CAPITAL.



c. NORTH OPEN RAILING FROM SOUTH.



d. OPEN RAILING PILLAR.



b. MAKARA PINNACLE.



e. NORTH OPEN RAILING, WEST END.

Photo-Engraved & printed at the Offices of the Survey of India, Calcutta, 1916

fronted the most celebrated temple of Vāsudeva of the day. The stump in question must, therefore, have belonged to a pillar, which stood on this site. And it is not unreasonable to suppose that this pillar was surmounted by the rail capital described above. This supposition finds corroboration in the fact that the stone of both the capital and the stump is of the same variety, and in the fact also that the proportion of the diameter of the octagon to that of the capital bell is nearly the same in this as in the case of Khām Bābā. It is possible that the Garuḍa on this pillar was riding the *makara* and made fast to it by the tenons of the former being secured into the mortises near its eyes which had puzzled Cunningham so much.

The site we selected for excavation was in the neighbourhood of the antiquarian objects just described and covered an area of three acres approximately. It is divided nearly into two halves by a country track, branching off from the Bhilsa metalled road and leading to Amāchhāvar. In the western half, in close proximity to this track stand the Khām Bābā column and the house of Bābājī, the former being near the north-east corner of the latter. Both on the north and south of the house the mound was fairly high, except for the small depression in the immediate south caused by a trench cut and re-filled by Mr. Lake four years ago. Not far from this depression at the south-east corner of the house are lying the rail capital and the *makara* pinnacle alluded to above. At a distance of about twenty-five feet behind Bābājī's house the ground suddenly sloped considerably. At the north and west the plot is bounded by the hedge of Bābājī's land. The eastern boundary is formed by the country track just mentioned, and the southern by another joining this and the metalled road referred to above. The eastern plot is bounded on the north and west by this Amāchhāvar track and on the east and south by the hedge. The ground of this plot was fairly even, except where it rose a little towards its north-east and sloped off towards its south-east end.

Excavation was first started at the two places previously exposed by Mr. Lake, *viz.*, in the depression just alluded to, to the immediate south of Bābājī's house in western plot and about 100 feet to its south-east in the eastern plot. The trench cut at the former place has been denoted trench C, and that at the latter trench A, in the map. After exposing a few parts of railings Mr. Lake refilled both the trenches, I was told, at the request of Bābājī, who, on account of his cattle, was anxious to see them restored to their original condition. These trenches I reopened, but at right angles to each I sunk a cross trench designated B and D and cutting A and C respectively. Comparing Plate LV *a* with Plate VI[1] of Mr. Lake's account it appears that when he filled trench A, some of the railing pillars were shifted from their original position. In this trench traces of two different kinds of railing were found. They may be distinguished as (1) the open, and (2) the solid railing. The first is of the well-known type, the most notable specimen of it being furnished by that at Sānchī. The one unearthed in trench A is, however, of the plainest description, neither the pillars being bevelled nor the cross bars decorated with medallions as at Sānchī. Only two of its pillars are approximately in position; the rest have fallen down. The railing originally ran from east to west, but it could be traced only over a length of about 51′6″.

[1] The plates accompanying Mr. Lake's account of the excavations at Besnagar have not been numbered, and the plate here referred to is the sixth in order.

At the west end it meets the other railing, but on the east it must have run to a considerable distance, although not a vestige of it is now visible. This is intelligible enough as the soil on this side is on a lower level than even the original ground of the railing.

It was not possible to determine the height of the pillars of the railing, as the tops of all have been knocked off. The stone of these pillars, though it is pink sand stone, is of two varieties. Six are of the kind of stone that is at present found in the quarries at Pohrā, three kos from Bhilsā, and two of the variety of those of the Udayagiri hill, one kos from Bhilsā. These last are the ones mentioned above as nearly *in situ*. The lower portion of the former pillars, which was underground, is rough dressed all round, but of the latter only on its sides, the fronts being as finely dressed as the upper portion, which was exposed to view. The width of the former again varies from 1′ 6″ to 1′ 8″, and thickness from 10″ to 10¾″. The width of the latter is 1′ 7″, and the thickness 10¼″. The height of the lower rough dressed portions of the pillars varies between 1′ 6″ and 1′ 7″. Each pillar is provided with three socket holes on each side to receive cross-bars, which are all of Udayagiri stone. The dimensions of the socket-holes also vary. In the case of the pillars of the Pohrā variety, the height of the socket-holes is uniformly 22″, their width varying from 5¾″ to 6″ and their depth from 2¾″ to 3¼″. The socket-holes of other pillars are 22½″ × 6″ × 3½″. The coping stones, so far as the preserved specimens go, are of the Udayagiri stone. The length, as determined from the one entire piece now extant, is 7′ 9¾″. The height varies from 1′ 7¾″ to 1′ 8½″, and the thickness from 9¾″ to 1′. The socket holes of the coping stones differ similarly in dimensions. Its length varies from 7″ to 7¼″, and breadth from 5″ to 6″, its depth alone being uniformly 3″. The intercolumniation of the railing ranges between 3′ 8″ and 3′ 10¾″. The coping stone thus seems to have spanned two inter-columniations as at Sānchī.

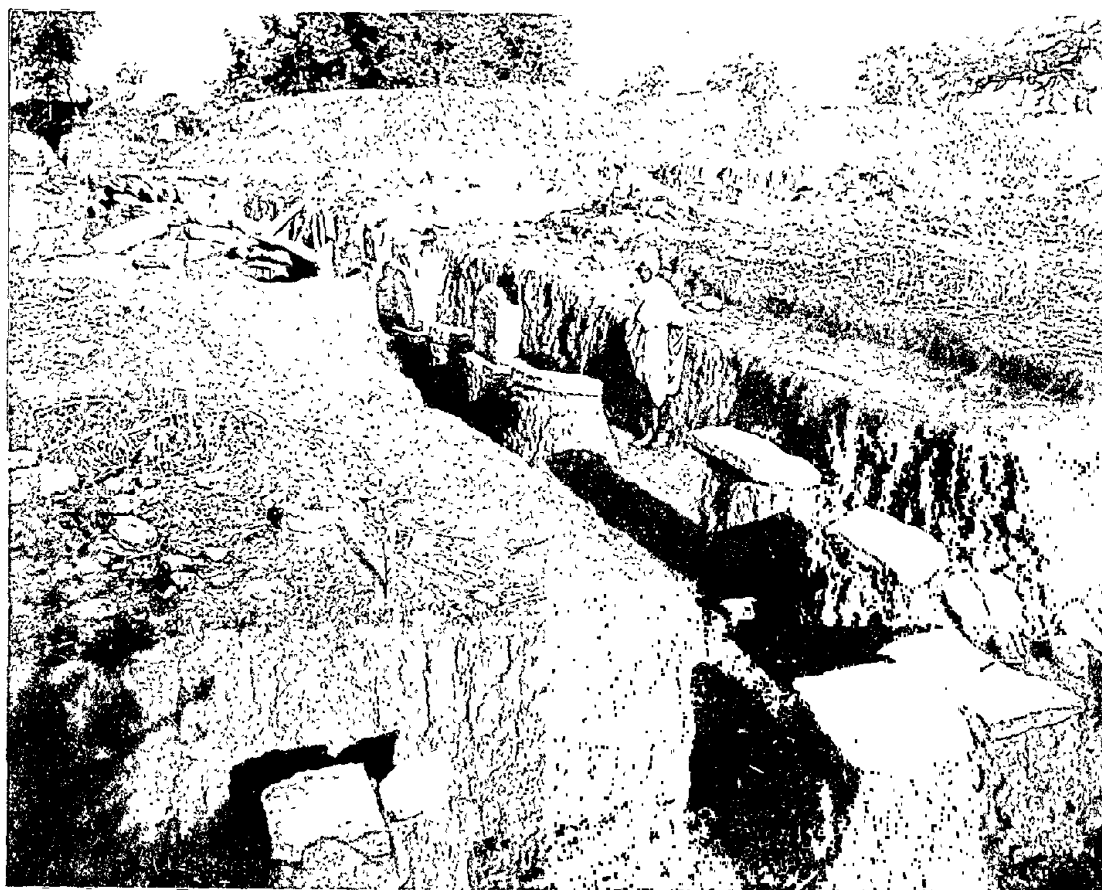
The foundations of this railing are 3′ deep, and spread over a width of 5′ 8¾″. The lowermost course is of tiny boulders in a layer of *debris*. Above are placed rough stone slabs at the places where the railing pillars stood. In some places as many as three slabs were placed one upon the other, and cemented with black earth. The pillars did not rest directly upon these slabs, but at least two layers—one of earth and one of *murum*—intervened, as appears from the condition of the foundations below the two pillars which are still nearly *in situ*. The spaces between the pillar foundations were filled with old *debris* and laterite *murum*, all fairly well rammed down and laid in alternate courses. The laterite *murum* is really pulverised laterite of the type at present noticeable near the river bed. The old *debris* is composed of earth plentifully mixed with tiny pieces of brick, pottery, and also fragments of a pavement made of *chunam* and *kankar*. The use of this *debris* in the foundations is significant, and shows that the railing was rebuilt. And the fact that some members of the railing are of the Udayagiri and others of the Pohrā variety lends strong support to the above conclusion. There is little doubt that originally the whole of this railing, like the northern railing unearthed in Trench E to be described shortly, consisted of Udayagiri stone only, and that, when it fell into disrepair and was re-erected, new pillars of the Pohrā variety were made, this stone being of a harder grain and better able to stand the stress of weather.

It has been stated above that only a length of approximately 51′ 6″ of this railing was traced, and that at its west end it met the solid railing. This last was not at first recognised to be such, as it presented in appearance an altogether unknown variety.

EXCAVATIONS AT BESNAGAR.



a. SOUTH OPEN RAILING.



b. NORTH OPEN RAILING.

What was brought to light here was a continuous line of long stone slabs with but a fragment of partition screen on it near the junction of the two railings. The meaning of it all, however, was far from clear when it was unearthed in trench A. It was not till a trench on the north side of Bābājī's house was sunk, and better preserved parts of this type of railing exposed, that it was possible to recognise the existence of a similar one in trench A also. The traces of this railing, however, could be detected only up to 28 feet approximately. But just where it broke off a fragment of one of its pillars was found. Trench A was cut for a distance of 140 feet, and one narrow cross trench was sunk at right angles to this railing on each side just where it broke off, but no further trace of the railing could be detected. Originally, however, it seems that this solid railing ran straight on in the line indicated by trench A, till it met the one exposed in trench G behind Bābājī's house and running from north to south as will be seen later on.

The soil on both sides of the railings exposed in trench A is highly artificial and contains layers of different materials, such as laterite *murum*, pieces of pottery, ashes and so forth. They are more or less rammed down and are of such a nature that they do not seem to be the natural result of human habitations of different periods, but rather of a deliberate attempt at flooring on both sides of the railings—a supposition which gains weight by the fact that it comes to the level of their original ground floor. Possibly this flooring was laid at the time of the restoration of the open railing, in order to add strength to its foundations and safeguard it against an inundation.

On the north of trench A, about 7 feet from where the solid railing had broken off, was exhumed a brick walling with a water-channel close beside it—unmistakable traces of some human habitation. About 8 feet from it towards the east side were found two large earthen jars in close proximity to the solid railing, but at least 4 feet below its ground-level. Many such earthen jars were brought to light during excavations near the temple of Gaṇeśa in old Besnagar, all of them much below the ground level of the dwellings near which they stood. The purpose of these is not certain, but probably they were used for storing grain. Not far from them was found a *hauz* or cistern, the sides of which appear to have been badly damaged when Mr. Lake excavated here. The *hauz* seems originally to have been a square, with each side measuring at least 11′ 6″. It seems to have been constructed of mortar laid on a solid bedding of brick-bats intermixed with tiny boulders. Evidently it was used for bathing purposes.

No minor antiquities of any importance were unearthed in trench A proper. In trench A_1, however, just in that portion where it crossed the country track running to Amāchhāvar, two copper coins of the Nāga dynasty were discovered. From the southern part of the narrow trench sunk at right angles to the solid railing at the point where it had broken off was also picked up an earthen drinking vessel with a spout and a carved band running round the centre. (Plate LXI, No. 90.)

Trench B, which crossed trench A, was comparatively abortive, though a few minor antiquities, including coins and toys, were brought to light. In the southern part of this trench were discovered the remains of a brick and stone walling, which, no doubt, originally formed part of a dwelling. In the northern part of it, also, a few remnants of a similar kind were visible. About 3′ 9″ below the original ground surface we came upon a heap of ashes spread over a surface of two feet square and

descending two feet deep. Beyond one *kārshāpaṇa* and a few bones nothing was found these ashes.

In trench C, which was cut immediately to the south of Bābāji's house, ten pillars and one coping stone were discovered. This was the second of the two trenches which Mr. Lake had dug on this site. Two of the pillars belong to a solid railing, and the remaining eight and the coping stone to an open railing. Again, of the latter pillars only one is a corner pillar and the others ordinary. Mr. Lake does not appear to have cut this trench far enough,as he discovered only five pillars. From the finds which he made Mr. Lake concluded that a railing had stood here, running from east to west. But a little reflection will convince anyone that there was no railing here. In the first place, where the open railings have fallen, the pillars have always dropped down either on one side or the other of the line in which they ran. In the present case, all the pillars have fallen in the direction of the line in which the railing is supposed to have run. Secondly, though no less than ten pillars were found, there was but one coping piece discovered, and there was not a trace of any cross-bar, foundation slab or foundation layers. The absence of these last two is highly significant, because it is inconceivable that the railing could have been erected here without any foundations or that they have been wiped out altogether when, on the contrary, there was much greater likelihood of their being preserved, being below the ground level, than any members of the railing above. Nor can these pieces be supposed to have fallen from a railing on the stone platform, which, no doubt, stood where Bābājī's house is at present and to which reference will be made later on, because trenches were sunk on three sides of this platform, and it was only in trench C that these pillars were found. If any railing had really topped this platform some traces of it would have been found also in the other trenches bordering on the platform. Secondly, along with eight pillars of the open railing, two of the solid, were also unearthed; and we can hardly presume that the platform was surmounted by two railings, one open and the other solid? The conclusion is, therefore, irresistible that there existed no railing on the south side either below, or on the top of the platform, and that the railing pieces discovered in trench C had only been stacked at this place.

It has been stated above that of the eight pillars of the open railing variety one is a corner pillar, and the others ordinary. These last are very much battered, and consequently no accurate measurements were possible except in the case of one. This is 8′ 8¼″ long, including 1′ 7″ of the rough dressed portion (Plate LIV, *d*). Its breadth and thickness respectively are 1′ 6½″ and 11½″. The dimensions of the socket holes of only four of these pillars could be accurately taken. Their height is uniformly 1′ 8″. Their width varies from 6″ to 6¼″, and depth from 2¾″ to 4¼″. These pillars may have belonged to one and the same railing, but the corner pillar, which is broken, could not possibly have formed part of it. The length of its socket holes is uniformly 22¼″, while the breadth varies from 6″ to 6⅜″ and the depth from 2¼″ to $2\frac{11}{16}$″. The height of the pillar socket holes, which never varies materially and which often gives a correct clue to the railing to which it pertains, shows that this corner pillar, whereas it is alien to the railing to which the four ordinary pillars belonged, was itself a member of the southern open railing exposed in trench A. It probably stood at the eastern end of this railing, from which an arm must have jutted out originally

like that from the eastern end of the north open railing, as we shall see presently.

Near one of these pillars, the third from the eastern end, was found by Mr. Lake the upper half of an image originally with four hands, three of which are now broken off. The fourth, which is better preserved than any of the others, is the proper back left hand and is upraised. It rests on a lion head which seems to have crowned a weapon, the lower portion of which is now destroyed. The back right hand is partially preserved, and shows that it also was raised and wielded some lengthy weapon. The other two hands were evidently lowered. Behind the head is sculptured a nimbus. About 80 feet from this pillar near the south-west corner of trench F sunk immediately behind Bābājī's house was discovered by me the lower portion of this image but without its feet. The features, the crown and head dress behind it,the peculiar earrings, the neck-lace, the breast ornament, and the lower dress are so exactly like those of the figure of Vishṇu, carved in the verandah of the Udayagiri cave, containing the inscription of the Gupta sovereign Chandragupta II, dated 82=A.D. 401, as to leave little doubt that both the images were not only of the same age but also chiselled by the same sculptor. It is not easy to decide which god is represented by this image unearthed in trench C, because the objects held in the hands, which alone would have enabled us to settle it, are all gone. But taking into consideration the fact that in all other respects it bears an exceedingly close correspondence to the figure in the cave it may perhaps be inferred to be an image of Vishṇu. On the other hand, it has to be remembered that the attendants of Śiva and Vishṇu are known from sculptures to have often been dressed exactly like these gods. The doubtful object, again, held by this image in its proper upper left hand, is unlike anything ever borne by Vishṇu. May this image, therefore, be one of Garuḍa, Vishṇu's vehicle? One noteworthy feature about this image is that it is a figure in the round. I have not seen any image of Vishṇu, at any rate, of an early period, which was meant for worship and was sculptured in the round. Nor am I aware of any image of Vishṇu which tops a column. It seems very tempting, therefore, to assume that this image is of Garuḍa and crowned the Khām Bābā column[1] The pedestal which, no doubt, supported it, must have been of the Gupta type ornamented with half seated lions back to back such, *e.g.*, as we find on the Eraṇ pillar of Budhagupta's time. The size and height of the image, again, are such as to suit the abacus top of Khām Bābā. Moreover, the image as we have seen from the reasons pointed out, must be of the time of Chandragupta II. And what can be more natural

[1] There is really nothing in this image which runs counter to the above view. The image having four hands need not be argued against its being of Garuda, because the *Vishṇudharmottara* allows four hands to Garuḍa, lower two of which were most probably joined and folded together in the *añjali* pose as ordained by this iconographic work. Similarly, the nimbus behind the head of the image does not create any difficulty, because this also is sanctioned by the *Vishṇudharmottara*, and is actually found in the case of Garuda in a cave at Bādāmī. The absence of the prominent beak nose and the wings, which no doubt invariably characterise Garuḍa of the post-Gupta period, does not likewise militate against our view. The Eraṇ column of Budhagupta is surmounted by an image which cannot but be of Garuḍa. It is true that the inscription on it simply speaks of it as a *dhvaja* or pillar of Vishṇu, but this can only mean that it was a *Garuḍa-dhvaja*, because Vishṇu crowning a column is unheard of and is against all Hindu mythology. Besides the image on the Eraṇ column holds a serpent in its two hands. This shows that it must be a Garuḍa only. Now, this image is conspicuous by the absence of the beak-nose and wings, although it is of Garuḍa. It is no wonder, therefore, if these features are not found in the Besnagar image also, which like the Eraṇ one, belongs to the same period.

than that this Gupta king, who was a staunch devotee of Vishṇu and is known from inscriptions to have come to Vidiśā, should have crowned the column with this image of Garuḍa ?

Trench D, which was cut at right angles to trench C, revealed the remains of the foundation walling of an old dwelling and of a brick wall in front. The dwelling faced the north, and was approached by a flight of three steps, the uppermost of which is 6′ 4″ long and 3′ broad. The steps led to an antechamber which appears to have been floored with concrete from the large pieces of it that were here brought to light. Below the stairs and the antechamber was a foundation course of laterite *murum*. The western side of the interior chamber could be traced only up to a length of 26½ feet, and the north side up to 19 feet from its western end. The other part of the north side and the whole of the eastern side are irretrievably gone. There can be little doubt that this was a dwelling of some importance (probably of the *pujārī* of Vāsudeva's temple), as here bricks, tiles, pottery and nails were found in far larger quantities than in any other trench on this site. Some pieces of curious burnt clay conical pinnacles were also found, analogous to those which Dr. Bloch discovered in his excavations at Basaṛh. They were unearthed by him in the ruins of old houses, and I agree with him in his view that they were the pinnacles of the roofs. The pieces in question were found not only in this trench but also in trench E 2 where also remnants of an old dwelling were traced.

In order to determine whether any dwellings originally stood in this neighbourhood the whole of the soil on the west, covering an area of 62′ long by 60′ broad, was cleared up to the level of the foundation walling. This excavation was not very successful, though it was by no means an abortive one. About 10 feet from the walling was unearthed a stone mortar, such as that used for separating grains of corn from husk. Farther on were exposed two tanks, one 14 feet to the south-west, and the other 26 feet to the west, of the mortar. The latter, which is the smaller, is 9′ 8″ long and 5′ broad. Its sides do not seem to have been raised to any appreciable height, and its surface consists of mortar laid on a hard bedding of stone and brick bats, as in the *hauz* exposed near trench A. It has no inlet or outlet for water, and, inasmuch as it is on the same level as the staircase, it appears to be a bathing place connected with the dwelling. The other *hauz* seems to have served a different purpose. Its sides are inclined and are much higher than those of the first. They could not have been less in height than 3′ 6″. In point of construction this *hauz* is much weaker, as it is formed of mortar liquid splashed on a mere earth surface. When this spot was being dug out, an objectionable smell filled the air, arising from the bones of a camel which had been buried in it. Evidently the *hauz* had been constructed for this purpose, and as the condition of the remains indicated, the burial could hardly have taken place more than a century ago. Before the Bābā, who originated the worship of Khām Bābā, came to reside here, the present site is said to have been occupied by a family of rich jewellers. It is possible that this *hauz* was prepared to bury the carcass of a pet camel—a conclusion which gains ground by the disinterment of an elephant's bones in a trench behind Bābājī's house, to which we shall come further on.

It has been stated above that a brick wall also was exposed right in front of the dwelling in trench D. The brick wall, again, could not have been contemporaneous with

the construction of the dwelling, as a distance of only 1′ 9″ separates the former from the last stair of the staircase leading to the latter. Now, while carrying on excavations here, layers of lime and stone *kankar* were traced running from the front of the antechamber of the dwelling right up to the pillars exhumed in trench C. What the meaning of these layers is, will be perceived later on, but here it will suffice to mention the fact that these layers raised the original ground level at least up to the top of the staircase just referred to. The brick wall thus seems to have been raised after this filling was effected, and the staircase, being buried in it, makes it nearly 7 feet distant from the antechamber of the dwelling. The brick wall, as it is at present, is 7′ 9″ long, and rests on a foundation course of tiny boulders. This foundation course was traceable also in the same line on the west but on the other side of the entrance of the dwelling, showing that a similar brick wall existed here also. To put the same thing in other words, the brick wall, though it was in front of the dwelling, does not appear to have passed directly in front of its entrance (the staircase being at that time lost in the new filling), but rather flanked it. The purpose of this brick wall was far from clear.

A fifth trench (trench E) was commenced from the north-east corner of the eastern plot. The ground here was higher than elsewhere in the plot. Besides, I was assured by Bābājī that his ploughshare, whenever it was employed, struck against large stones on this side of his field. Everything thus seemed promising. And excavations here led to the discovery of another open railing, corresponding to that in trench A and running like it from east to west. Traces of this railing were found, except for a gap of nearly 30 feet, over a distance of 220 feet in a line till its western end met the solid railing exhumed on the north of Bābājī's house. Where its eastern end was could not be definitely determined, but it was most probably represented by the junction point from where juts out a shoulder running towards the south (Plate LV *b*). This shoulder makes an angle of nearly 84° with the main line, and was traced only up to a distance of about 26 feet, containing only three foundation slabs of the type found below open railings. The pillars, rails, and coping stones in this line have all disappeared. It is possible that a similar subsidiary railing branched off from the eastern end of the south open railing. But no member of it has survived, which is not strange having regard to the fact that the ground here is much lower than even the original ground level of the railing. In the northern main railing fourteen pillars are *in situ*, or, at any rate, very nearly so. Six have fallen near their foundation slabs, and the rest are gone. All these except one were preserved only up to their lowermost socket holes, the upper portions being destroyed. This solitary exception, again, is broken into pieces, but it suffices to enable us to determine the height, which is 10′ including the rough dressed portion at the lower end which is approximately 1′ 6″. The height of the pillars of this railing above ground must have been uniformly 8′ 6″; the width from 1′ $6\frac{1}{2}$″ to 1′ 9″; and the thickness from $7\frac{13}{16}$″ to $10\frac{1}{2}$″. No whole coping stone was found, and in fact, only one piece of a coping stone was unearthed in this trench (Plate LIV, *c*). It is thus impossible to say what its length was. Its height, however, is 1′ 8″ and the thickness $9\frac{1}{4}$″. The dimensions of its mortises are 6″ × 5″ × $2\frac{1}{4}$″. The full height of this railing thus comes to $9\frac{3}{4}$ feet above the original ground level. The socket holes of the pillars are shattered, and no accurate measurements are possible. All the members of this railing are of Udayagiri stone. Below each pillar is a foundation slab, the former resting immediately on the latter and the

voids between the two being closed with broken stones and brickbats. Above the foundation slabs up to the top of the rough dressed portions of the pillars runs a course of old *debris* surmounted by a layer of laterite *murum* along the whole length of the railing, and below, a course of concrete and boulders.

Two trenches, *viz.*, E_1 and E_2, were cut on the north of this railing with a view to clearing the ground here. In the immediate vicinity of this railing were exposed two foundation courses, one upon the other, running over a length of 105 feet with brick remains on the top. One of these courses was composed of boulders and the other of laterite *murum*. There can be little doubt that a brick wall stood here, similar to that exhumed in trench D. These foundation lines were found crossed towards the west by another foundation course, which continued and crossed the railing also. This course is of semi-circular alignment reaching almost to the well, and consists of stones on the north and of brickbats on the south of the railing. This in all likelihood represented a pathway leading to the well. As the brick wall is only 4 feet from the railing, they cannot be of the same age. The wall must have been built when the railing fell into disrepair, and it was at this time that the pathway also was made. Between the pathway and the brick wall were traced portions of concrete floor and inside brick walling, no doubt the remnants of a large structure that existed here. The bricks of the inside walling are of two sizes. The measurements of one variety are $11\frac{1}{2}'' \times 8\frac{3}{4}'' \times 2\frac{3}{4}''$. Bricks of the other size measured $1'\ 1\frac{3}{4}'' \times 9\frac{1}{2}'' \times 3\frac{3}{16}''$, and have one side moulded with four grooves. It was here that fragments of conical pinnacles similar to those in trench D were discovered, suggesting that this site was once occupied by a dwelling. Remains of another dwelling were also unearthed, but on the other side of the footpath. The bricks of its walling were all more or less broken, and it was not, therefore, possible to measure their length. Its breadth and thickness respectively are $8\frac{7}{8}''$ and $2\frac{7}{8}''$.

Pari passu with trench E we sunk two more trenches, one immediately behind Bābājī's house (trench F), and the other immediately on the north (trench G). We commenced excavating the last from its western end and at first lighted upon only thin long foundation slabs running in a line with a few insignificant fragments of its superstructure, the significance of which was at first beyond our comprehension. Not until we traced this line over a distance of 74 feet and came upon its superstructure (Plate LVI, *a*) preserved to nearly one-third of its height and *in situ*, was it possible to conclude that originally a railing ran here. This railing is quite unique in design. In contradistinction to the open railing, such as is typically illustrated in the one surrounding the Main *Stūpa* at Sānchī and in those exhumed in trenches A and E on the Khām Bābā site, the new one may be called the solid railing. The pillar of the latter is of comparatively small section. Its sides have no socket-holes to receive cross-bars as in the case of the open railing, but are each cut with chases for the whole length exposed above ground. Into the chases of these pillars were fitted screens or panels of stone. Of this railing only eight pillars are extant, and all of these are *in situ* together with nine stone panels. The upper portions of the pillars (and also of the panels) have broken off, and it is not, therefore, possible to determine the exact height of the railing. Of these broken pillars the highest was only 4′ 6″ above ground. Between this new railing and Bābājī's house another pillar was unearthed. Its height measured 6″ $8\frac{3}{4}''$, but even this pillar was not whole and entire as no rough dressed surface could

EXCAVATIONS AT BESNAGAR.



a. NORTH SOLID RAILING.



b. WEST WALL OF SHRINE PLATFORM.

Photo-Engraved & printed at the Offices of the Survey of India, Calcutta, 1916.

be detected at either extremity. It was thus not possible from the pillars to settle the height of the railing. But as its eastern end met the north open railing, it is more than probable that their heights were identical. The north open railing, we know, was approximately 9¾ feet high, and this may, therefore, be taken to be the height of the new railing also. But, if the assumed height of this railing is correct, the height of its pillars (excluding tenons) could not have been less than 8′ 9″ above ground as will be seen from the height of its coping stone and the depth of its chase specified below. Their rough dressed portions vary from 1′ 1″ to 1′ 2½″. The breadth of the pillars, which are in position, varies from 8¾″ to 12¼″, and their thickness from 7¼″ to 8¾″. The breadth and the thickness of the pillar exposed in the diggings between this trench and Bābājī's house are 11½″ and 6½″ respectively. The chases of these pillars do not seem to have been cut to a uniform length, as in some cases they descend into the very rough dressed portions concealed underground. The width of the chases is uniformly 2½″, but its depth, which, in some cases, differs even on both the sides of a pillar, varies between 1¾″ and 2¼″.

No coping stone of this railing was found in the trench, but one was discovered in the *chabutrā* or platform round the Khām Bābā column. In the soffit of this coping is a groove in which the panel was evidently fitted. The coping stone is not whole, but as its length is not less than 6′ 6″ and the intercolumniation of the railing varied from 3′ 6″ to 4′ 4″, it appears that it spanned two intercolumniations. The joint of the pillar, which was found between this railing and Bābājī's house and which has been previously alluded to, consists of a central tenon (somewhat battered) with a side projection and shouldered recess, which indicates that the pillar in question supported not one but two coping beams. The contiguous ends of these beams must have been so chiselled that one of them rested upon the projection and the other upon the shouldered recess of the pillar top, the two being held together by the pillar tenon let into mortises in the copings. Near this pillar was found the top piece of another pillar which ended merely in a tenon. This doubtless represents the intervening pillar of the railing, on which only one coping stone rested and which came centrally between its ends. The construction will be clear from the restoration on Plate LVII.

The pillars of the railing, like those of the open railing in trench A, do not rest directly on the line of foundation slabs; neither do the railing panels. The intervening space between them and the foundation slabs is filled with broken laterite, stone chips and *debris* of *surki*, mortar and pottery fragments, all rammed down into a solid homogeneous mass which reaches up to the top of the rough dressed portion of the pillars. A uniform interval was preserved between the pillars and the foundation slabs, and where the former were not sufficiently long, a thin slab of stone was placed on the foundation slabs to ensure the fixed interval. Similar stones were found also between the railing panels and the foundation slabs where the intercolumniation was greater.

It has been mentioned above that foundation slabs of the solid railing are in one continuous line in contrast to those of the open railing which occur only below the pillars. This long line of foundation slabs was necessitated by the stone rail panels whose foundation required as much support as the pillars themselves. The foundation slabs of the solid railing exposed in trench G are laid on a bedding of different materials. The black earth is in some places mixed with stone chips; in others stone *kankar* and in others again

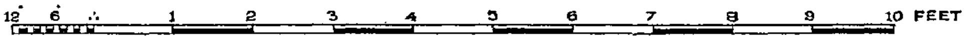
surki and *chunam kankar*. The slabs are of different lengths and thicknesses, but of very nearly the same breadth, which varies from 1′ 9″ and 1′ 10″. It is worthy of note that they do not run precisely in one line, as might be expected, but slightly deviate in at least two places. For this the floods are probably accountable.

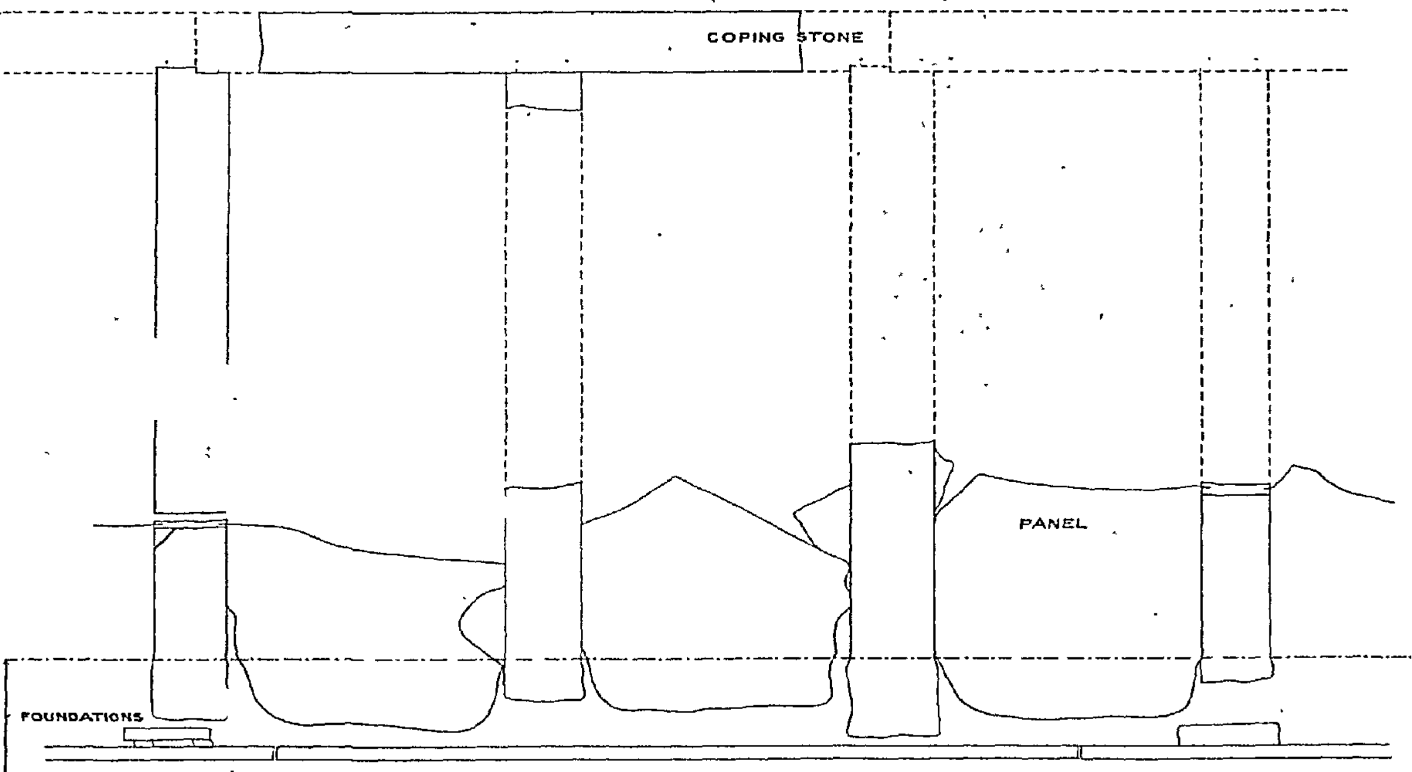
The west end of the north open railing is marked by a flanking pillar (Plate LIV,*e*). This pillar, like the others close beside it, is a mere stump hardly preserved much beyond its rough dressed portion. On the other side of the foundation slab on which it rests was found another foundation slab of this type. Suspecting that a branch open railing ran from this point I cut a long narrow trench southwards, which revealed thirteen more such slabs spread over a length of 45 feet (marked *a—a*) after which, however, none was found, although the trench was pushed so far as almost to meet the southern railing. Suspecting also that a similar arm projected from the junction of the southern open and solid railings, another trench was sunk, with the result that a foundation slab of solid railing (*c—c*) broken in three and lying north and south, was exposed at a distance of 50 feet from the junction. A little farther was discovered a similar slab (*d—d*) broken in twain and lying east and west. This slab, however, is thicker than but not so broad as the former. At its east end six foundation slabs of an open railing (*b—b*) were brought to light. Their relative positions have been clearly indicated in the plan of the site (Plate LI). It is clear from the above account that from the junction of the northern open and solid main railings branched off a subsidiary open railing marked *a—a*, and from a similar junction on the south a subsidiary solid railing marked *c—c*. In short, at each junction three railings met: namely, the main open railing, the subsidiary open or solid railing, and the main solid railing. Obviously the branch railings met an inside entrance to the Vāsudeva temple, perhaps in the manner indicated by the dotted lines in the plan of the site (Plate LI). The word *inside* has been employed, because, just as we have reason to suppose that a branch railing sprang from the east end of the north open railing, we may assume that a similar one most probably jutted out from that of the south open railing, and both ran to meet each other and form the outer entrance.

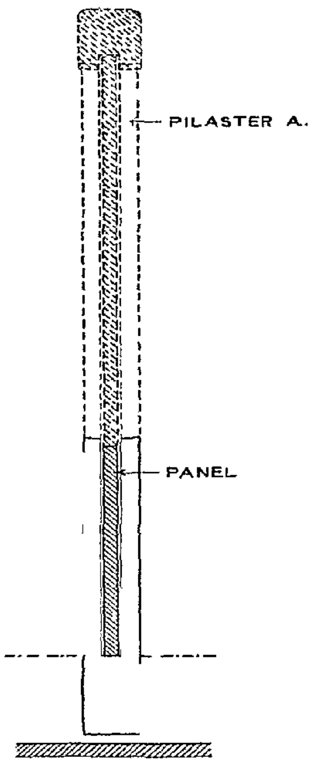
To settle whether what we thought to be the western end of the north solid railing was really so, and if so, to determine where and how it turned off, we cut three trenches, one in continuation of trench G and the remaining two at right angles to it, one on the north and the other on the south called G¹. This last showed us that our surmise was correct and that the railing afterwards turned off to the south almost at right angles to the first line. Only the foundation slabs were brought to light. There was not a trace of its superstructure. This was, however, not surprising at all, considering that the ground here was at a very low level, lower even than the original ground of this railing. These foundation slabs, again, could be traced only up to a distance of 28′. The line then suddenly broke off, and, after a distance of about 51 feet, we lighted upon another piece of foundation slab. We continued, however, to push the trench southwards, when after an interval of about 64 feet were exposed two more pieces, one lying north and south and very nearly in a line with the foundation slabs unearthed in this trench and the other perpendicular to it and lying east and west. It seemed as if the western side of the solid railing terminated here and met the southern side. Consequently we dug a long narrow trench in the line of the second of these two pieces, but in vain.

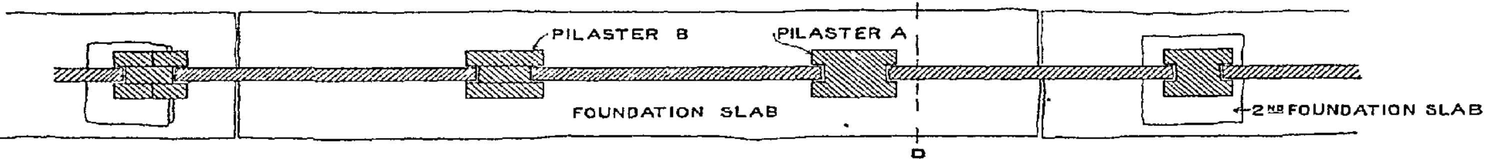
EXCAVATIONS AT BESNAGAR.

Restoration of solid railing.









NOTE
PRESERVED WORK ———
RESTORED WORK - - - - -

Nearly 20 feet from it, but somewhat outside the trench and on the south, was discovered another foundation slab with a similar, but erect, piece, flanking it at its west end, but on a level at least 9″ higher than that of the two pieces just referred to. These finds suggest that, after the destruction of the original line of the solid railing caused most probably by floods, at least two attempts were made to fix its southern line at two different places. But, as has been pointed out above, originally the southern line must have been represented by the solid railing which was found contiguous with the open railing in trench A, and which must have run parallel to the northern side exhumed in trench G, till, like the latter, it met the western line.

It has been stated above that when trenches E and G, which yielded the north open and solid railings respectively were cut, a third (trench F) was also sunk immediately behind Bābājī's house. This led to the unearthing of a masonry wall packed dry, and much out of plumb (Plate LVI, *b*). As the remains of this wall seemed to spread far beyond the width of the trench, the whole ground between Bābājī's house and the western side of the solid railing was cleared. The length of this wall is nearly 80′ and its thickness 10′. It is no less than four feet out of the perpendicular. Its present height is 5′ 2″. Not far from it are two heaps of stones, which, no doubt, must have fallen from the top of this wall. But they do not appear to have fallen simultaneously with the wall, because they are on the layers of lime and stone *kankar*, which seem to have been purposely put in to raise the level, as we have seen near the *pujārī's* house exposed in trench D, and which spread from this wall down to the solid railing. The same phenomenon is noticeable also on the north side of Bābājī's house. What the most probable explanation of it is, will be seen later on. At both its ends this wall seemed to turn off towards the east, and so at its north end we first cut one trench. This exposed another wall of the same style and condition. Its thickness is exactly the same as that of the first wall but its present height is 4′ 1½″. Its full length could not be ascertained, because after we had extricated it for nearly 60 feet we were obstructed by the walling of a comparatively much later dwelling which was here unearthed. A similar attempt was made on the south side also, where a third wall was laid bare, but only partly; for we had cleared only about five feet when Bābājī, being apprehensive of the safety of his house, requested us to stop all work on this side. I thought it expedient to accede to his request, and so did not push further the work of clearing the south wall. Thus on three sides of the mound which is surmounted by Bābājī's house three walls of the same pattern were exhumed, and the conclusion is all but certain that we have here the three retaining walls of a platform. It was impossible to trace out the fourth wall of this platform, as this involved the demolition of the front part of Bābājī's house.

Near the south-west corner of trench F and almost touching trench C was exhumed the lower portion of an image referred to on page 159 above. As already stated, it was found to fit the upper portion unearthed in trench C by Mr. Lake four years ago and now deposited in the Besnagar Museum. Not far from the image fragment, were disinterred the bones of an elephant, which like those of the camel found in the *hauz* near trench D, were probably the bones of an elephant belonging to the family of jewellers who once lived here.

Our attention was now directed to the Khām Bābā column itself. Was it *in situ* or not? On the one hand, the inscription on this pillar as it stood was on the level of the eye. This led us to think that it was in position. The solid railing, on the other hand, which passed in its close vicinity was on a much lower level than the platform from which the column emerged. Could the column have been put up in its present place at some later period and have had absolutely no connection with the railings we exposed? The question could be answered only by sinking a trench in front of the pillar. Bābājī was obdurate at first, and would not allow us to defile the divinity in this manner. But after some negotiation I succeeded in securing his consent, and we were delighted to find that the column was *in situ* (Plate LII, *b*), and very nearly on the same level as the solid railing.

A description of the column, as it stood above the platform, has already been given and only an account of the portion now exposed is here necessary. The excavation showed that it continued to be an octagon down to its lower end, which is 8′ 1″ from the top of the platform (Plate LIII). Only three faces of the column octagon were exposed, *viz.*, the north-east, north and north-west. The first length of six feet is well dressed except in the case of the north-west face where it extends further down to 3½″. It is obvious that the dividing line between the rough and fine dressed surfaces must have very nearly coincided with the original ground level of the pillar. It is worthy of note that even the rough dressed portion of the shaft, which was evidently intended to remain underground, is an octagon like the fine dressed above, which was exposed to view. This is a characteristic of the pillars of the Śuṅga period, and was noticeable also at Sānchī when some of them were unearthed. Again, the column above the platform gave the impression that its present rough exterior was due to its being indifferently dressed originally. But the buried portion now revealed showed that the surface was very finely dressed indeed, though not to such a degree as to vie with Aśoka's columns, and that the present appearance of the upper portion was doubtless caused by the unceasing action of weather. This weathering is due to the variety of stone selected, for even in the portion of the shaft exposed one or two weather-worn patches were not wanting, though being buried underground for a length of time, they appeared in far better condition than the surface of the column above the platform. Nearly two feet from the platform top a rather large piece of the shaft has peeled off, leaving a perceptible depression. The corners of the north and north-east faces at the lower end were also in a condition threatening to flake off.

The column rests on a stone block, rough but made fairly even at the top, its extreme length and thickness on the side exposed being 4′ 3″ and 3⅝″. To make the pillar quite perpendicular, two pieces of iron and two stone chips had been driven in between them. The former are near the north-east, and the latter one on each edge of the north-west corner of the northern face of the shaft octagon. Similar pieces may have been used on the other side, which was not exposed. As a matter of fact, the column, as it is now, is out of plumb by about 2¼″, having inclined towards the west. On sinking a trench in front of Khām Bābā, three ground levels of three different periods were brought to light, the lowest indicated by a group of foundation layers extending uniformly in front over a length of 1′ 4″, the middle by another group extending over 4′ 2″, and the upper represented by the present ground at the bottom of the column platform. The

first group is 2′ 4″ high, and shows that the original level of the pillar was $1\frac{3}{4}$″ above the line demarcating the rough from the fine, dressed portion of the shaft. It consists of no less than twelve layers, which are as follows, beginning from the lowest: (1) a layer, $6\frac{1}{4}$″ high, of broken up laterite such as that of the rocks found near the river bed; (2) a very thin layer of black earth mixed with *surki;* (3) a thin layer of black earth and stone metal; (4) very thin layer again as in (2); (5) a layer of laterite, $2\frac{1}{2}$″ high; (6) a layer of black earth mixed with *surki* and stone metal; (7)-(10) layers of laterite alternating with layers of black earth; (11) a layer of laterite and (12) a layer as in (3). It is worthy of note that these layers are discernible only on the east side of the shaft, the west being now a jumble of all the materials used in these courses. It appears as if through some agency the layers on the west side became wet and loose, and were, therefore, rammed and solidified into the mass that we see. The layers just specified, no doubt, formed the foundations of the column when it was put up by Heliodoros. These did not, however, end with the layers just indicated, but extended down far beneath. Below the stone slab on which the pillar rests is another, whose extreme length and breadth are 2′ 6″ and 6″ respectively. In between are two layers, the upper of laterite and the lower of stone metal with a tiny layer of black earth sandwiched between on the proper left of the shaft. Beneath the second foundation slab are the following layers descending from top to bottom: (1) a thin layer of black earth; (2) a layer of stone metal; (3) black earth $3\frac{1}{2}$″ high; (4) broken up laterite $1\frac{3}{4}$″ high; (5) black earth mixed with brick and stone pieces, 6″ high; (6) a thin layer of broken up laterite; (7) black earth; (8) a layer of stone chips; and (9) broken up laterite mixed with stone metal. Then comes black earth—the virgin soil—which extends down to 2′ $3\frac{1}{2}$″, followed by yellow earth. Thus the original foundations of Khām Bābā extended to a depth of 5′ 9″. A time came when it was necessary to add to them at the top. Four layers appear to have been added, two of broken up laterite and two of stone *kankar,* alternating with one another and forming together a height of 1′ 4″. That these four courses were later additions and were not original is clearly proved, I think, by the fact that whereas the twelve layers above detailed, extend only 1′ 4″ in front of the shaft as already mentioned, these four run up to no less than 4′ 2″. The top of the first group of layers, again, almost coincides with the line that divides the fine and rough dressed portions of the shaft, but these go at least 1′ 4″ even above the former. This upper and later group of foundation layers is separated from the present ground by a height of 1′ 3″ only, consisting of an accumulation of *debris.*

It has been mentioned above that two iron pieces were found below Khām Bābā. At the suggestion of Sir John Marshall I sent one of these for examination to Sir Robert Hadfield, who has more than once been kind enough to make analyses of iron implements for the Archæological Department. The following are the remarks with which he first favoured me: "I have now examined the specimen found at the base of the Khām Bābā column. This was received in such an oxidised condition, that it was almost impossible to get a proper analysis. The composition was found to be as follows :—

C.	Si.	S.	P.	Mn.	Cr.	Ni.	Fe.
·70	·04	·008	·02	·02	trace	trace	99·5

"I also made physical tests, of which the following are the particulars:—

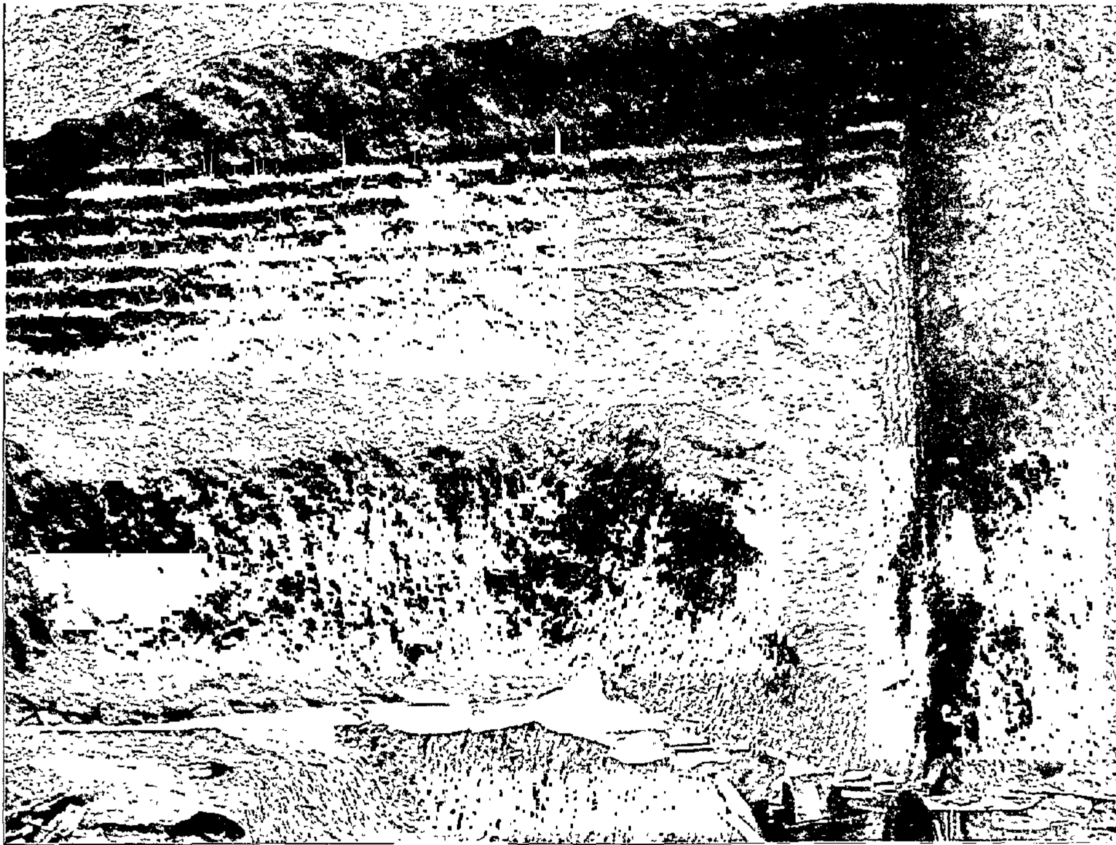
"There are some parts of the specimen from which one could obtain fracture, which showed fine crystalline to fibrous, rather brittle. The Brinell ball hardness number was 146 after all the scale had been removed. On cutting the specimen through with a saw there was found to be a fair proportion of the original metal still unoxidised. The metal is folded over with scale in between the fold."

Two months later I received another communication from him, which was even more interesting than the first. He says: "I have now made a further examination of this specimen, and somewhat to my astonishment find that it contains ·7 per cent. carbon, which means of course that the material is steel and could be hardened by heating and quenching in water. This is the first specimen I have found of really ancient date in which there has been found a considerable percentage of carbon. The specimen therefore becomes of unusual interest, that is to say as to its age."

It was a matter of no little gratification to find that Khām Bābā was in its original position; for it now clearly showed that the temple of Vāsudeva referred to in the inscription was in its neighbourhood and that consequently both types of railing, the solid as well as the open, and the three retaining walls of the platform, being on a level not very different from that of the column when it was set up, were all connected with that temple. Secondly, as we know the approximate age of the column, by comparing its original ground level with those of other structures we exhumed, it was easy to deduce their relative ages. Thus we know that Khām Bābā was put up circa 140 B.C., and the original ground level of the northern solid railing at least 9″ lower than that of the column. This shows that the former is anterior to the latter. How much anterior it is impossible to say, but we shall not be far wide of the mark if we assign this railing to B.C. 165. The north open railing is practically on the same level as the north solid one. But both the open and solid railings on the south occupy a level nearly two feet higher than this. This indicates that those, as they stand, are of later date, which agrees with the previous conclusion that they were rebuilt. The *pujārī's* house, on the other hand, has almost the same level as the solid railing on the north, and originally at least was of the same age as the latter, though it may have been preserved long after even the destruction of the railing.

The question that now engages our attention concerns the location of the shrine of Vāsudeva. Obviously the mound, on which Bābājī's house is at present situated, must be considered to represent the site of this shrine. The open and solid railings enclose three structures, of which one is a well. The other two are surrounded by the solid railing, which passes in immediate proximity to each. Of these we have cogent reasons to assume that the one on the south was a dwelling, most probably of the *pujārī*. The remaining structure, of which only a platform was extricated, and that but partly, and which was buried in the mound of Bābājī's house, can alone indicate the ruins of the old shrine. It was not, however, possible to explore this mound thoroughly and systematically, as Bābājī's dwelling was there. But I was able to prevail upon him to allow us to dig a small trench in the court inside his house. This was sunk commencing from the north retaining wall of the platform. It was carried to a depth of 15′ 4″ till the yellow soil was reached. The results, however, were disappointing. At a depth of about 8′ 6″ from the surface we came upon a thin floor of old broken

EXCAVATIONS AT BESNAGAR.



a. VIEW OF BRICK WALL FROM N.-W.



b. VIEW SHOWING LIME AND KANKAR COURSES.

Photo-Engraved & printed at the Offices of the Survey of India, Calcutta, 1915.

tiles, well consolidated, with a still thinner layer of yellow earth upon it. Curiously enough it accords with the ground level of the soild railing, and one is tempted to conclude that this was the original ground of the shrine which stood here. But as not a single vestige of the structure was discovered between this floor and the top of the trench, I am inclined to suppose that the temple originally stood not on this floor but on the terrace itself. Or it may be that the shrine was originally erected on this floor, but as its sanctity increased a platform was afterwards constructed and a new shrine built on it for the deity.

Most of the tile pieces found in this foundation bedding were Indian red in colour though a few were reddish brown. They have a channelled key moulded on the upper side and are lap-jointed at one edge upon the underside. These tile fragments are obviously of the time when the original temple of Vāsudeva was erected and cannot possibly be later than the solid railing, which we have attributed to B.C. 165. Even at such an early period the craft of tile-making seems to have far advanced.

Two or three other trenches were sunk in the soil outside the north solid railing. Beyond yielding a few miscellaneous articles such as coins, toys and so forth, they were not fruitful. Not far from the north-west corner of the railing was also exposed part of a composite pavement of stones and bricks. An idea occurred to me that, though we had dug trenches to the level of the foundation slabs of the solid railing, none had been sunk on this side to any greater depth with a view to see whether any still more ancient remains were hidden there. One was, therefore, cut close to this railing at the north-west corner. After digging down to about three feet below its foundations we lighted upon a line of bricks, which on further excavation proved to be the top of a brick wall standing on yellow soil (Plate LVIII, *a*). Nearly sixty-six feet of this wall on its north side were exposed, and I have no doubt that it extended right up to the front of Khām Bābā, where, in the trench sunk before it, three courses, exactly similar and almost in a line to those of this wall, were detected. The wall thus ran on the north side for 160 feet at least. As the season was far advanced and labour was becoming scarce on account of the Holi festival, I was most reluctantly compelled to leave off the work of tracing the line of this wall. This work, therefore, has been reserved for the next season. At its west end it was joined by another running north to south. Of this wall only 15 feet could be traced when it suddenly broke off. We continued the trench 15 feet farther, but without success. It is just possible that still farther digging in the same direction next season may bring to light portions of this wall. The maximum height of the wall so far exposed is 3′ 4″. Originally, however, it must have been much higher than now, as traces of its bricks are found up to 1′ 8″ above its topmost course in the alluvial soil brought in by the floods to which reference will be shortly made. The face of the wall batters towards the top, but the batter is not spread uniformly over the courses. The present topmost course inclines inwards at least 8″ from the bottom. Most of the bricks are reddish brown, but a few are clear red. None, however, seem to be of Indian red colour. They are at least of three different dimensions. Some measure $17'' \times 9'' \times 3\frac{1}{8}''$, some $19'' \times 8'' \times 3\frac{1}{4}''$, and others $17\frac{5}{8}'' \times 8\frac{1}{2}'' \times 2\frac{3}{4}''$. They seem to have been laid on no definite principle. As a rule, after laying a few of them as headers, one or two seem to be placed in as stretchers. The principle of bonding, however, has been strictly observed inasmuch as no two joints come immediately one above the other

In order to determine whether any material was used in cementing these bricks to one another, I separated a few belonging to two consecutive courses. This was not, however, without some difficulty ; so fast were they stuck one to another. I was delighted to find the presence of such a material, and to observe that the upper side of each brick possessed four grooves, the two middle being broader and longer than the side ones. These were no doubt intended to make one brick adhere firmly to another when cemented. Some quantity of this material was sent by me for analysis to Dr. H. H. Mann, Principal of the Poona Agricultural College, and he was kind enough to supply me with the following report :—

" The mortar derived from the brick wall gave on analysis the following figures :—

Total Siliceous matter	51·60	per cent.
containing soluble Silica	8·20	"
Total Lime (CaO)	14·11	"
Magnesia (MgO)	2·74	"
Combined Carbonic Acid.	5·64	"
(equal to Calcium Carbonate)	12·81	"
Oxide of Iron & Alumina	20·00	"
Potassium & Sodium Chlorides	0·30	"

" This analysis gives the idea of a well made mortar, prepared with a full recognition of the purpose served by sand and clayey matter in making the material, as well as the lime. In this respect it appears to be far in advance of many Phœnician and Greek mortars, which contain far too much lime and far too little sand for the best results. It approaches much more in type many of the Roman mortars, but the reduction in the amount of lime has been caused further than in these mortars with the probable result of weakening the cement.

" The clayey matter does not seem to be of any special type. The sand is composed almost entirely of clear quartz, waterworn grains. The clayey matter presents no special features.

" The soluble salts (Potassium and Sodium Chlorides) are very low in amount, much lower than is common in old mortars in some of the dry regions of India."

The wall is only 2′ 2″ thick, its interior face being not neat and finished as its exterior. What the purpose of this wall was is not clear. Further excavations, which will be undertaken next cold season, may enable us to determine it. It is, again, by no means easy to decide whether this wall was originally constructed on yellow soil, or stood on black, its foundation courses alone being built upon the former. Whichever of these suppositions is accepted, this much is certain that the destruction of its walls was caused by some such agency as inundation, for between the foundation slabs of the solid railing and the bottom of the brick walls the soil is purely of the alluvial kind, not a trace of any ancient remains, such as pottery, coins, and so forth having been detected, except the imbedded pieces of bricks which, as stated above, are found up to a height of 1′8″ above the northern brick wall and which from their make and texture leave no doubt as to their having belonged to it. The sudden rise of ground to a height of at least eight feet cannot be explained except on the assumption of an inundation, which is not at all incredible, as the Beś, one of the rivers of Bhilsa, is but two furlongs from this site. It is this inundation which alone can adequately be held responsible for having

demolished the upper portion of the brick walls, buried the remainder in silt washed in, and raised the height of the whole site very nearly to the original ground level of the solid railing. There are unmistakable indications of yet another inundation, equally destructive in its effects, if not more so. And this is all the more remarkable when it is remembered that the site had already risen eight feet. It has been mentioned above that two of the stone retaining walls of the platform, on which the shrine of Vāsudeva stood and which was buried in the mound of Bābājī's house, have buckled outwards. Whether the other two walls had similarly leaned forwards we had no means of determining, as they could not be laid bare. Those that have actually been exhumed are inclined outwards, and there is reason to suppose that the south wall of the platform is similarly out of plumb. Another fact to be borne in mind is that the layers of lime and stone *kankar*, which have been noticed in trenches C and D and also in the diggings behind and on the north side of Bābājī's house, all issue from these walls. Now, the questions arise : (1) why have these walls inclined forward ? and (2) where was the necessity for these lime and *kankar* courses ? The answer can only be : flood. This agency alone seems accountable for throwing the walls out of the perpendicular, and the fillings of lime and *kankar* which start from them were evidently intended to fortify the walls against similar contingencies and render also the soil round about impervious to the action of water. It is worthy of note that, whereas on the south side of Bābājī's house the filling has been done to a fairly uniform level, that on the north and west has spread over a slope. It is difficult to decide whether this slope was deliberately given to the soil on these sides or was caused by the floods themselves, though the latter supposition is more probable. The filling again seems to have extended even beyond the line of the solid railing. This indicates that the floods played havoc on the north and west sides of this railing. The havoc appears to have been complete with the west line, of which nothing but a few foundation stones have remained. The destruction fortunately was not so great on the north side, where its superstructure to at least one-third of its height was preserved, though only over a length of 30 feet, and so it was possible to comprehend the nature of this unique railing. This filling, as stated above, consisted principally of lime and *kankar* courses. There was no definite plan according to which these courses were laid, though the *kankar* layer is a constant feature and is invariably found at the top. Lime seems to have been profusely employed in the formation of this filling in the north-west corner of Bābājī's house in trench G (Plate LVIII, *b*), and is traceable in fairly large quantities both behind and on the south side of it. Towards the eastern end of trench G, however, lime seems to be very sparsely used, and is conspicuous by its absence as the trench approaches Khām Bābā itself, the *kankar* layer alone being prominent and meeting the *kankar* line which forms the top course of the second ground level of the column referred to above. It thus appears that these floods affected also the foundations of this pillar, a conclusion confirmed by the fact that the twelve courses of the original foundations, which hid the rough dressed lower end of Khām Bābā, though they are clear and distinct on the east side of the shaft, are on its west a mingled and confused though compact mass, showing that the layers on this side had become loose and mixed through the action of water and had, therefore, to be rammed down into a solid mass. And this also perhaps explains why the pillar is slightly out of plumb and leaning on this side. One more curious proof, if

any is needed, in favour of a second inundation having occurred on this site, is afforded by the find of at least two different kinds of river shells intermixed with the earth, which had buried the partly preserved portion of the north side of the solid railing. These shells are still found on the banks of the Beś river and they leave little room for doubt that the Beś water rose to this height and destroyed the railing.

In trench G, not far from the superstructure of the solid railing exhumed therein, were found a lot of minor antiquities on a level of from 8″ to 14″ above its original ground. The preserved portion of this superstructure, as we have seen, is 4′ 3″ above the ground level, and was buried in the silt brought in by the second inundation. Thus these antiquities cannot possibly be posterior to the time when it took place and caused destruction. Amongst these is a clay seal with the name *Dha(ṁ)mam(i)tasa* engraved on it in characters which have to be assigned to the second century A.D. It is difficult to avoid the conclusion that this second inundation occurred not earlier than the second century. Again, in trench F, which was sunk immediately behind Bābājī's house, no less than eight coins were found. Of these seven had been concealed in a tiny earthen pot discovered at the place marked in the map of the site. On cleaning they were recognised to be the coins of a king called Kṛishṇarāja, who has so far been supposed to belong to the Rāshṭrakūṭa dynasty, but who, as will be proved presently, could have been no other than the Kalachuri prince of that name who flourished *circa* 550 A.D. Nearly three and a half feet below this level was brought to light the eighth coin, at the spot indicated in the map. This on examination turned out to be of Gautamīputra Yajña Śrī-Śātakarṇi of the Andhrabhṛitya family, who is known to have lived about 175 A.D. This coin was found buried in the stones which now form the top of the west retaining wall of the platform of Vāsudeva's temple. The first find of seven coins shows that the temple was in use up to the middle of the 6th century A.D., and was probably so even a century later as is proved by the characters of the pilgrims' names incised on one of the railing pillars found stacked in trench C (Plate LIV, *d*). The discovery of Yajña Śrī-Śātakarṇi's coin need not puzzle us by its being of about the same date as the seal referred to above and used for fixing approximately the date of the second inundation. For though the floods this time rose so high as to cause the retaining walls to bend forward, there is absolutely no evidence to show that the shrine itself or the upper surface of its platform was in any way damaged. There is, therefore, nothing strange in finding coins of the period of the second inundation on the top of these walls.

The Khām Bābā site, where the excavations described above were conducted, is, strictly speaking, outside the confines of the old town of Besnagar, which, as stated at the outset, are defined by two rivers, the Betwā and the Beś. It occurred to me that an excavation on a small scale might also be undertaken with profit in the heart of these ruins. A site was accordingly selected, which was behind and not far from the shrine of Gaṇeśa which stands by the pathway now leading from the present village of Beś to Bhilsā. The foundations and walls of old brick dwelling houses with brick pavements in front, probably of the Kshatrapa period, were unearthed. No structure of any importance was brought to light, and consequently the excavation was stopped, though in point of minor antiquities it was more successful than the Khām Bābā site. Here too the laterite *murum* was found to play an important part in

the foundations. And on inquiry I found that this practice continued even to the present day. In front of most of these dwelling houses large earthen jars were laid bare, but invariably on a lower level. One or two were found surrounded by brick masonry, intended, in all likelihood, to ensure their durability. In the description of the excavation in and near trench A at Khām Bābā I have already referred to a similar jar unearthed in the close vicinity of a brick habitation and on a lower level, and have expressed the opinion that it was used for storing grain. Though the remains of the houses here exhumed belonged to one period, the bricks used in their construction were of different dimensions.

Minor Antiquities.

Of the minor antiquities found in these excavations, a list of a few representative specimens must suffice. Cowries and clay balls of small size were found in numbers. The former no doubt passed for coin, as they still do in many parts of India. Equally numerous were two other kinds of objects, the first of which are flat pieces cut out of potsherds. They vary greatly in size. They were probably used as weights. Such pieces are still used by the Bhilsā people while playing certain local games, and may perhaps have served a similar purpose in ancient times also. Objects of the second kind have been described by some as spindle-whorls and by others as clay-beads. But for them to become really effective as spindle-whorls one side should have been flat. As it is, all of them are spherical, and at both ends the surface is sunk. Some of them again are so large in size as to render unlikely their use as beads. What their original purpose was it is not now possible to say, but certain it is that even to this day they are made by the potters of Bhilsā and used as ornaments in *jhumars* which, according to the local custom, are presented to a woman who gives birth to a son.

The number of terra-cotta figurines unearthed was large. Most of them belong to the later Gupta period. Of the human figures nearly half are male and half female. The backs of most of them are flattened as they are to the present day in Mahārāshṭra. Of other living beings figurines of the duck, parrot, elephant, horse, ram, bull, tortoise and fish have been found, which must have served as playthings to children. Of these the neck of the tortoise and the mouth of the horse are each pierced with a hole, no doubt for passing a string through it and pulling the animal with it. The bull is represented as squatting, and through the knees of its forelegs a similar perforation has been made. Five miniature wheels were also discovered which must have originally formed part of toy-carts, no doubt reminiscent of the one with which Rohasena, infant son of Chārudatta, is represented to have amused himself in the *Mṛichchhakaṭika* drama which itself was named after it.

The copper wire rods referred to in the list (Plate LX, 83-5) were almost all found in the houses unearthed behind the temple of Gaṇeśa. Some have both their ends thick, and some have one end thick and one end pointed. They are supposed to be antimony sticks. But antimony sticks ought to be of soft metal, and are at present made of lead, whereas these are hard and being of copper are likely to do harm to the inner coat of the eyelid. Fragments of shell bangles were also obtained in fairly large quantities, the shell being cut across in sections and joined together with wire, the minute holes,

through which the latter passed, being observable in at least two specimens. In some cases patterns are incised on them. Such shell bangles have been found at various places, *e.g.*, at Charsada in the Frontier Province by Sir John Marshall, at Brāhmaṇābād in Sind by Mr. Cousens, and at Śaṅkaram in the Madras Presidency by Mr. Rea. They are worn even to this day by Banjārā or Vaidu women. But in ancient days they seem to have been considered worthy of rich women, and Arjuna, when he assumed the garb of Bṛihannaḍā, is represented in the Mahābhārata to have worn them.

Another interesting find is that of pencils some of which are of soap-stone and some of bone. One in particular, is well preserved. It shows that one end is pointed, and the other slightly thicker. "According to Burnell and Rice, the Kanarese traders till at least 1877 used for their books of business a kind of cloth, called *kaḍatam*, which is covered with a paste of tamarind seed and afterwards blackened with charcoal. The letters are written with chalk and steatite pencils, and the writing is white or black.[1] This suits excellently. Mr. Rea also speaks of having discovered soap-stone pencils in his excavations of a Buddhist monastery on the Śankaram hills.[2]

In the sphere of pottery nothing of special importance was found except two or three specimens. All the finds of this class must be referred to the 6th century A.D., till which time, as we know, the temple of Vāsudeva was frequented. They are of various kinds but by no means unlike, though not exactly like, those found elsewhere in excavations. Figure 90 on Plate LXI is, however, noteworthy not only for the gloss and the decorative band, but also for its shape, which is that of a modern tea-pot. Of similar gloss, colour, and carved band is the piece figured No. 91 on the same Plate. On Plate LXI No. 92 deserves to be noticed, because it contained the seven Kalachuri coins noted above. Of stone-ware only three specimens were found. One of these looks like a saucer. The second is a lid with a cylindrical neck, and the third appears to be the lower portion of a casket without its lid. All these are of steatite and were found in the excavations near the Gaṇeśa temple.

By far the most interesting class of minor antiquities unearthed is the coins. Sixty-eight were discovered near Khām Bābā, and thirty-two near the temple of Gaṇeśa. The latter are all copper coins, and are *kārshāpaṇas*. Of the former fifty-seven are copper, of which forty-nine are *kārshāpaṇas*, two belonging to the Kshatrapa and five to the Nāga dynasty, while one is unidentifiable. Of the remaining, one is a lead, and ten silver coins, of which latter three are Kshatrapa and seven Kalachuri. Thus the *kārshāpaṇa* coins found in both the excavations number ninety, and are all of copper except one which is of lead. There is a passage in the *Visuddhimagga* of Buddhaghosha from which it appears that *kārshāpaṇas* were either elongated, oblong or round in shape. Of the lot found a great many are oblong, a few elongated, and only two round.

The *kārshāpaṇas* are popularly known as punch-marked coins. This agrees with the expressions such as *rūpaṁ chhinditvā kata-māsako* or *rūpaṁ samuṭṭhāpetvā kata-māsako* used by the commentary *Sāmanta-pāsādikā* on the *Nissaggiya-pāchittiya*. No *kārshāpaṇa* is thus possible without some *rūpa* or form cut into it. Mr. Theobald, who has made a special study of this class of coins, has enumerated no less than 277 of such *rūpas*, or symbols as he calls them, and has classified them under six heads. But

[1] *Indian Palæography* by Bühler (English Translation), p. 93.
[2] *A. S. R.*, 1907-08, p. 172.

in spite of this classification and others proposed by him and other numismatists, our knowledge of these *rūpas* can hardly be said to have really advanced. What, *e.g.*, is gained by us being told that one group of such *rūpas* is human figures, a second, animals, and so forth? What we want to know is the significance of the human figures, or animals such as the elephant or horse that have been punched on them. In this connection, let me remark that it is only the king who can issue coins or permit other individuals or corporations to strike them. It is, therefore, quite natural to expect symbols of royalty to be punched on such coins. Pāli literature is never weary of re-iterating the seven *ratnas* or gems, the possession of which constitutes permanent sovereignty. They are: (1) *chakra* or wheel, (2) *hastin* or elephant, (3) *aśva* or horse, (4) *maṇi* or jewel, (5) *strī* or woman, (6) *gṛihapati* or treasurer, and (7) *pariṇāyaka* or prime-minister. There is nothing peculiarly Buddhistic about this enumeration, and it would be illogical to suppose that they are specially characteristic of the Buddhist faith, simply because they are mentioned in Pāli books. Now, the presence of the first three devices on *kārshāpaṇas, viz.*, the *chakra, hastin* and *aśva*, can easily be recognised. The last three devices, again, are human figures, which do occur on these coins though somewhat rarely. No group, which consists of more than three human figures, has yet been indubitably detected. Mr. Theobald suspects this group to comprise one man and two women. But this also is not at all certain. The only conclusion possible in my opinion is that here we have the three human gems specified in Pāli literature, *strī*, *gṛihapati*, and *pariṇāyaka*. One symbol of sovereignty only now remains to be accounted for *viz.*, *maṇi-ratna*. Now the best *maṇi* known to Hindu ideas is *kaustubha*, which is worn by Vishṇu. Turning to the earliest images of this god with a view to see how this gem was represented I lighted upon the figure of Vishṇu sculptured in the verandah of the cave at Udayagiri, which contains an epigraph of Chandragupta II bearing the date 82=A. D. 401. The *kaustubha* jewel has been here shown on his breast, and may also be recognised on the breast of the Garuḍa which crowned the Khām Bābā column. It is exactly identical with what is called the Nāga symbol by numismatists. It need scarcely be added that the symbol is frequently met with on *kārshāpaṇas*. I have, therefore, no doubt that one of the groups of *rūpas* used on these coins is the well-known Seven Gems of the supreme ruler so often mentioned in Pāli works, and that they were punched on the coins by the kings who struck them as indications of their sovereignty.

It is well-known that at least two typical devices of *kārshāpaṇas* are found also on the reverse of the silver coins of the Western Kshatrapas. One of these consists of three superimposed semi-circular arches, which, according to some, represent a *stūpa* and according to others a *chaitya*. The second is a wavy line, which has long been rightly recognised to represent a river. Bhagwanlal Indraji has adduced cogent reasons to show that the first symbol stands for the mountain. He has quoted a stanza in which the prayer is made that a king may live as long as Mount Meru, the Ganges, the sun and the moon endure. There can be no doubt that, along with the two symbols just noted, the sun and the moon also are figured on the reverse of Kshatrapa coins, and as only these four devices occur on them and all are such objects as are very often specified in Sanskrit verses to denote permanency, it is impossible to disagree with Bhagwanlal Indraji's view. It is not, however, necessary to suppose as he does that Mount Meru and the Ganges themselves are intended on the Kshatrapa coins by the

two symbols alluded to above. It is more natural to say that they are representatives of the mountain and the river in general, which are even more frequently referred to in Sanskrit literature than Mount Meru and the Ganges, when the idea is to express permanency. The object of representing all these four symbols on Kshatrapa coins most probably is that they may last as long as the sun, the moon, the mountain and the river. But no two of these symbols are as a rule found together on *kārshāpaṇas*, and their significance must, therefore, be differently explained. In this connection it is worth while to remember the passage from the *Visuddhimagga* quoted in the Appendix. The purport of it is to describe how a lot of coins lying on a wooden slab would strike a raw boy, a rustic and a shroff; and we are told that the boy would notice simply that some coins were oblong, some round and some elongated in shape, that the rustic would know all this and also that the coins were like gems, worthy objects of enjoyment to mankind, but that the shroff not only would be conversant with all these matters but also would be in a position to decide, after handling the coins in a variety of ways, which of them were struck at which village, borough, town, mountain and river bank, and also by what mint master. It is thus clear that every place whose coinage was issued had its own distinguishing mark stamped on it, and in confirmation of it may be noted that on the majority of *kārshāpaṇas* unearthed at Besnagar the device of the river is prominently noticeable, indicative probably of the Vetravatī (Betwā). Consequently we may safely conclude that those *kārshāpaṇas*, which have the mountain or the river on them, were struck at those places and in order that the different mountains and rivers may be distinguished we find them differently figured. Figures 46-52 on Plate VIII of Mr. Theobald's article (*Jour. Beng. As. Soc.*, Vol. LIX, Pt. I), *e.g.*, shows how an attempt is made to distinguish one mountain from another on *kārshāpaṇas*. These different symbols of one and the same object the shroff of the ancient day was of course conversant with, and could tell from what different mountains or rivers the coins came. It would be interesting to know what the symbols representative of a village or town were.

Another group of devices noticeable on *kārshāpaṇas* is the auspicious marks of which the *svastika* and *nandipada* are the most conspicuous. Both these are met with also in old cave inscriptions, which either begin or end with them. The reverse of symbol No. 8 on Plate LXVI is found at the end of Kārli Cave epigraph No. 1, which begins with a symbol traceable on other coins, *e.g.*, on the reverse of coin No. 208 E on Plate VIII in Prof. Rapson's *Catalogue of the Coins of the Andhra Dynasty*, etc. More symbols common to both cave inscriptions and *kārshāpaṇas* may be discovered, if any attempt in that direction is seriously made.

If we carefully examine the faces of the copper coins and try to classify them, they divide themselves naturally into five classes. The first class consists of coins struck in imitation of the punch-marked silver (Plate LXIV, Nos. 13-21). A dozen of these were found near Khām Bābā, and three behind the Gaṇeśa temple. Their weights range between 40 and 11½ grains. The second class comprises coins of the type of No. 20 figured on Plate XI of Cunningham's *Coins of Ancient India* and found by him at Eraṇ in the Saugor district, Central Provinces (Plate LXIV, Nos. 27-31). One of the symbols of this type, which is much worn on that of Cunningham, is taken by him to be a human figure, but it is unquestionably symbol No. 7 of Plate LXVI. Ten coins in all were found of this class, of which eight came from the Khām Bābā. Of class III only three spec-

mens were found, one from Gaṇeśapurā and two from Khām Bābā (Plate LXIV, Nos. 1-2). Only one side is punched and that only with one symbol, *viz.*, that figured as No. 12 of Plate LXVI. Of class IV ten specimens were unearthed, all but one coming from Gaṇeśapurā. They are of the same type as No. 28, illustrated on Plate I of Cunningham's book referred to above, and are all cast coins (Plate LXIV, Nos. 24-26). The fifth or the last class consists of forty-three coins (Plate LXV, Nos. 1-21), and is itself susceptible of being divided into four sub-classes. I have no doubt that this is the indigenous coinage of Besnagar, the most striking feature of it being two waving lines representing a river with such aquatic animals as crocodiles, tortoises, and fish in between. It is curious that on some coins the symbol hereto supposed to be the taurine by numismatists is also found associated with them, and may also be seen on coins Nos. 17 and 20 on Plate XI of Cunningham's book. It thus appears that the symbol in question really represents some aquatic animal. It looks like a crab, but in the coins figured in Cunningham's books the river contains nothing but these symbols, and it is difficult to imagine how in the representation of a river we should find nothing but crabs, which are the least important objects connected with river water and which again are found on the banks only. Might these be conventional signs for fish, which, we know, were reckoned amongst auspicious objects in ancient times? The weights of the coins of this class seem to conform to two different standards, according to one of which a *karsha* or *paṇa* is 144 grains, and, according to another, 154 grains, thus making a *raktikā* or *krishṇāla*=1·8 and 1·925 grains respectively. This difference in standards may perhaps be explained by the difference in weight of the *raktikās*, which are never known to have exactly the same weight. Taking these two standards into consideration and making allowance for the diminution of the original weight caused by constant circulation, the coins divide themselves into several groups such as $\frac{1}{1}$-*kārshāpaṇas*, $\frac{3}{4}$ *kārshāpaṇas*, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, and even $\frac{1}{16}$ *kārshāpaṇas*. These can also be distinguished by their size. There are some *kārshāpaṇas* which have been struck in accordance with the *māsakas* contained in them. Thus there are some which weigh 4, some which weigh 3, and others which weigh only 2 *māsakas*. How the people of old times were able to distinguish between $\frac{1}{4}$, $\frac{1}{8}$, and $\frac{1}{16}$ *kārshāpaṇas* it is difficult to understand.

Only four Kshatrapa coins were found, of which two were copper and two silver. Both the obverse and reverse of the copper specimensare much worn (Plate LXV, Nos. 24-5), and in the case of one it is only the semblance of the Kshatrapa head that has enabled me to identify it. On the other, the letters °*dāmaputa* also can, though with some difficulty, be traced on the reverse. Of the silver coins one belongs to the Mahākshatrapa Vīradāman, of whose name only the letters Vīradāman are clear and distinct at the end of the reverse legend. The other is of his son Rudrasena II (Plate LXV, No. 23). The date on the obverse of his coin is clearly 177. The earliest date of his reign so far known is 180, and the date supplied by our coin is, therefore, three years earlier. As the last date of his predecessor Dāmajadaśrī III, son of Dāmasena is 176, it appears that 177 was the first year of Rudrasena II's reign. Only one Andhrabhṛitya coin was found, and that was on the west retaining wall of the platform on which Vāsudeva's shrine stood. It is of Gautamīputra Yajña Śrī-Śātakarṇi, and is of the Surāshṭra type struck in imitation of the Kshatrapa style (Plate LXV, No. 22). So far only three specimens of this type are known. No doubt has arisen with regard to

the legend on the obverse, but the reverse inscription seems to have been differently read and interpreted. This last so far as it is preserved on our coin reads: *Gotamiputa-kshahara-Yajña-Hāta-(kaṇi)* etc. The second word in the legend on his coin found at Sopārā has been read *ku-a-ru* by Bhagwanlal Indraji and *sha Hiru-* by Prof. Rapson. The latter reading is not supported by the electrotype published by Bhagwanlal which clearly demonstrates the characters to be *Ksha-a-ru* of our coin. The China stone inscription[1] of this king speaks of him as *Raño Gotamiputasa Araka-Siri-Yajña-Sāta-kaṇisa-* according to Bühler's decipherment. The word *araka* seems to have exercised him a little, and his proposal to take it as equivalent to *āryaka* cannot be accepted, as *āryaka* can be corrupted only into *ariyaka* or *ayyaka*. It is also possible to read the China record as *Raño Gotamiputa-saāraka-Siri*, etc., etc., and take the word *saāraka* as equivalent to *Kshahara* or *Kshaāru* of the coins. It further seems tempting to take all these words as equivalent to *Chhahara*, which occurs in the Taxila plate of Patika.[2]

No less than five Nāga coins were brought to light in the excavations at Khām Bābā. Two of these are too much worn for the reverse legend to be read. But of the remaining three two belong to Gaṇapati Nāga and one to Bhīma Nāga (Plate LXV, Nos. 29, 31 and 32). They are all copper coins. The latest coins that were brought to light are those of Kṛishṇarāja, found together to the number of seven in a tiny earthen pot on the retaining wall on which the Andhrabhṛitya coin was discovered. Coins of this king have been found in Nāsik district and also in Rājputānā. These have been assigned by Cunningham[3] to *c*. A.D. 375-400 and to a Rāshtrakūṭa king of that name. But, as shown by Prof. Rapson,[4] this attribution is quite incorrect, because this date is too early for the style of the coins, which are imitated from the latest Gupta silver coins. The earliest Kṛishṇarāja, again, of the Rāshṭrakūṭa dynasty flourished *c*. 766 A.D., which is too late a date for this type of coins. There can, however, be no doubt that the coins in question must be attributed to Kṛishṇarāja of the Kaṭachchūri dynasty. His son Śaṅkaragaṇa's copper-plate grant[5] is dated K. E. 347 (A.D. 575), and Kṛishṇaraja may, therefore, be placed about A.D. 575. This suits excellently, and fully satisfies the conditions insisted upon by this numismatist. It is a well-known fact that the Kaṭachchuri prince Śaṅkaragaṇa adopts certain epithets which are found associated with the name of Samudragupta in Gupta inscriptions,[6] and it is, therefore, no wonder if he issued coins in imitation of those of the Gupta dynasty. I have elsewhere shown that the Kaṭachchūris were a paramount dynasty ruling over Mālvā, Gujarāt, and the northern parts of Mahārāshṭra,[7] and quite in consonance with this fact are the finds of their coins in the Nāsik district, Rājputānā and at Besnagar. Śaṅkaragaṇa's copper plate charter was issued when he was at Ujjayinī, and the Vaḍner grant[8] by his son Buddharāja from his camp at Vaidiśa, *i.e.*, Besnagar. There can, therefore, be no doubt as to Besnagar being once held by the Kaṭachchūris.

[1] *Ep. Ind.*, Vol. I, p. 96.
[2] *Ep. Ind.*, Vol. IV, p. 55.
[3] *Archæol. Surv. Rep.*, Vol. IX, p. 30; *Coins of Mediæval India*, p. 8.
[4] *Indian Coins*, p. 27, § 100.
[5] *Ep. Ind.*, Vol. IX, p. 298.
[6] *Ibid.*, Vol. VI, p. 295 and ff.
[7] *Ind. Ant.* Vol. XL, p. 20.
[8] *Ep. Ind.*, Vol. XII, p. 33.

MINOR ANTIQUITIES DISCOVERED AT BESNAGAR.

TERRA-COTTA AND STONE FIGURES.

(1) *Human.*

KHĀM BĀBĀ.

1-2. Two fragments of seated figures, each $2\frac{1}{8}''$ high; head and feet gone; hands folded in praying attitude. Reddish buff clay without slip or paint.

3-11. Standing male figures, broken, of various heights; with left hand resting upon waist and right hanging down. In some, right hand holds a *kamaṇḍalv*. All clad in long garment reaching to the ankle. Buff clay.

12-13. Two heads, one $2''$ and the other $1\frac{7}{8}''$ high. Reddish buff clay.

14-17. Standing female figures, broken, of various heights, with left hand resting on waist and right suspended. One has both hands hanging down. Buff clay.

18. Head, $2\frac{1}{2}''$ high, hair dressed like a lawyer's wig. Reddish buff clay.

GANESHPURĀ.

19. Head, $1\frac{5}{8}''$ high, with nimbus. Light red clay.

20. Lower half of a standing figure, $1\frac{1}{4}''$ high, with folded drapery between the legs. Dull grey sandstone.

21. Lower part of a figure in motion, $2\frac{1}{2}''$ high, with left hand resting on left thigh and folded drapery in front. Steatite stone of bluish grey colour.

22. Female figure, $2\frac{1}{4}''$ high, with big ear-rings, with drapery suspended between the legs. Holds in both hands what looks like a garland. Steatite stone of black colour (now much decomposed).

(2) *Animals.*

KHĀM BĀBĀ.

23. Tortoise, $2\frac{1}{8}''$ long, with perforated neck. Other specimens were found but were more or less broken. Buff clay with thin wash of white colour.

24. Fish, $2\frac{1}{2}''$ long, including fins. Light red clay.

25. Duck, $2\frac{1}{2}''$ long, with feet; tail and right wing broken. Buff red clay.

26. Bird (parrot ?), $2\frac{3}{4}''$ long with beak broken. Buff coloured clay.

27-29. Mutilated elephants of various sizes. One of black clay and the rest of buff clay without slip or paint.

30. Torso of a horse, $2\frac{3}{4}''$ long, with slight indication of its rider. Light red clay

31. Hinder portion of a horse, $2\frac{1}{4}''$ long, with rider broken. Same material as No. 30.

32. Unidentifiable animal, $2\frac{3}{4}''$ long, with mouth pierced from side to side. Black clay with thin wash of dull grey colour.

33-36. Bullocks of various lengths; partly broken. One apparently intended for a tricycle toy. One is of black clay and the rest of light red.

37. Unidentifiable animal, $2''$ long, with head broken. Black clay without slip or paint.

38. Head of ram, with horns broken. Light red clay.

GANESHPURĀ.

39. Bullock, $2\frac{1}{2}''$ long, with front legs broken. Buff clay without slip or paint.

40. Animal (perhaps tiger), $1\frac{3}{4}''$ long, with one ear partly broken and some lines incised on the neck. Light red clay.

41. Horse, originally with rider, hinder portion of the animal and almost the whole of the rider broken off. Light red clay.

42. Elephant, 4″ long, with legs, trunk and tusks broken. Buff clay badly baked.

43. Tortoise, 2″ long, same as No. 23.

(3) *Decorative and other objects.*

KHĀM BĀBĀ.

44. Miniature terra-cotta *āmalaka*, 1″ high, flattened at both ends and with a hole at one end only. Buff clay without slip or paint.

45. Small flat piece of terra-cotta, $1'' \times \frac{7}{8}''$; one side only decorated with carving. Light red clay.

46. Polished terra-cotta pendant (?), $1\frac{3}{4}''$ long. Light red clay with thin black paint.

47. Terra-cotta cover of some vessel, $1\frac{3}{8}''$ diameter, carved with a lotus of six leaves. Light red clay.

48. Terra-cotta neck amulet, $\frac{1}{2}''$ square, one side perforated right through. On obverse a circle is embossed in high relief, and on the reverse a slight depression in the centre. Buff clay.

49. Terra-cotta bead, $\frac{15}{16}''$ diameter, with a fillet and perforated. Light red clay.

50-51. Terra-cotta knobs. Light red clay.

52. Tile fragment; convex decorated with ripple lines. Black clay with bright red slip.

53. Another tile fragment with scrolls in high relief. Light red clay.

54. Earthen disc, $1\frac{1}{2}''$ diameter, with a scroll in the sunk surface on one side. Light red clay.

55. Finial, $4\frac{1}{2}''$ high and 4″ diameter; domical shape. Light red clay.

56. Tablet, $4'' \times 3'' \times \frac{3}{4}''$, with 3 rows of incisions; used for cleaning the body. Light red clay.

57. Small cylindrical piece, $1\frac{1}{4}''$ high, slightly tapering. Buff clay.

58. Another piece, $\frac{5}{8}''$ high. Buff clay.

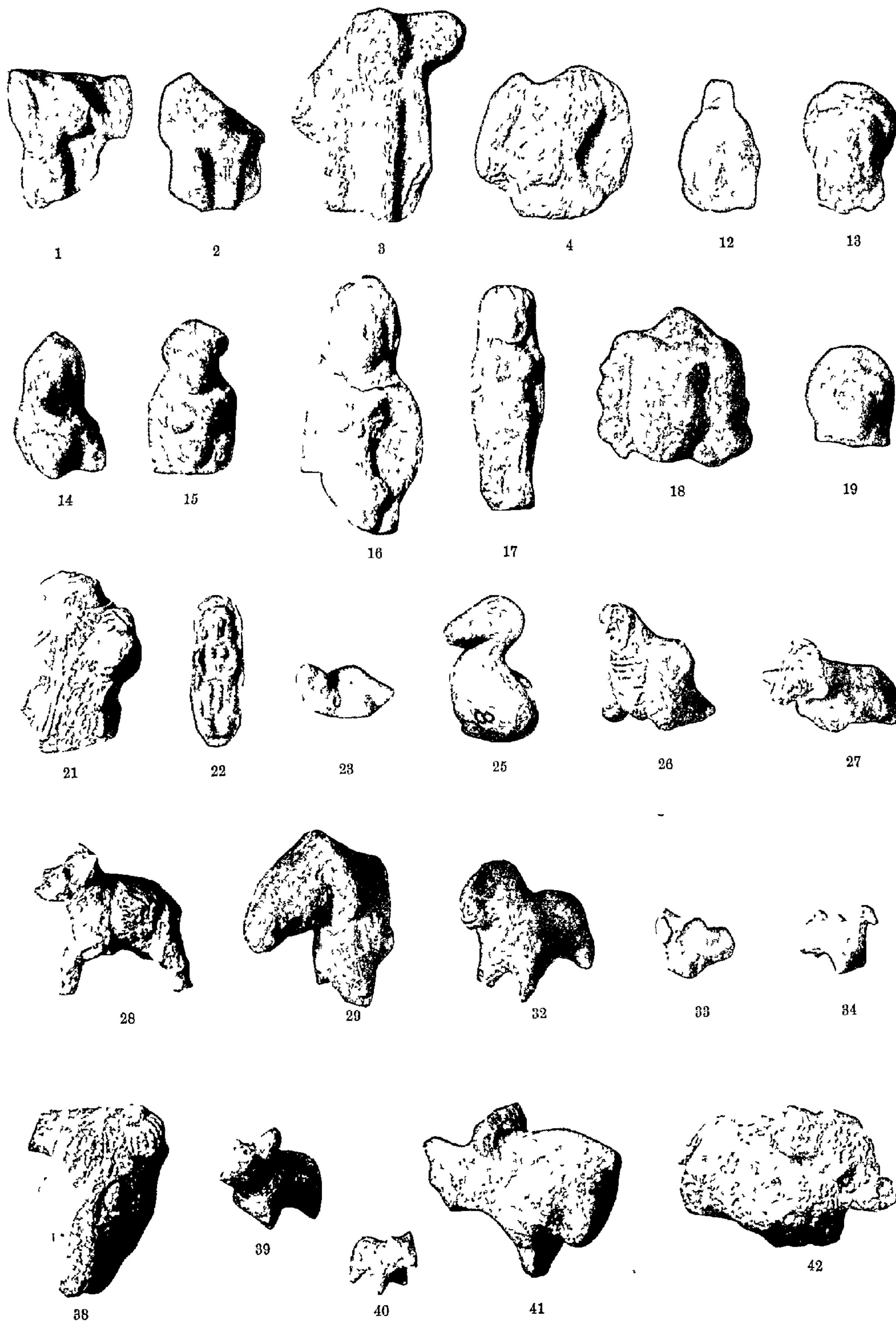
59. Fragment of a halo, $6\frac{3}{4}''$ diameter; carved with three bands in low relief, the central one containing a lotus flower design. Slate stone of dull red colour.

60. Agate bead, $\frac{3}{4}''$ long and double square shaped. Pale red colour.

61. Another agate bead $\frac{7}{8}''$ long; double heptagonal pyramid-shaped. Colour same as of No. 60.

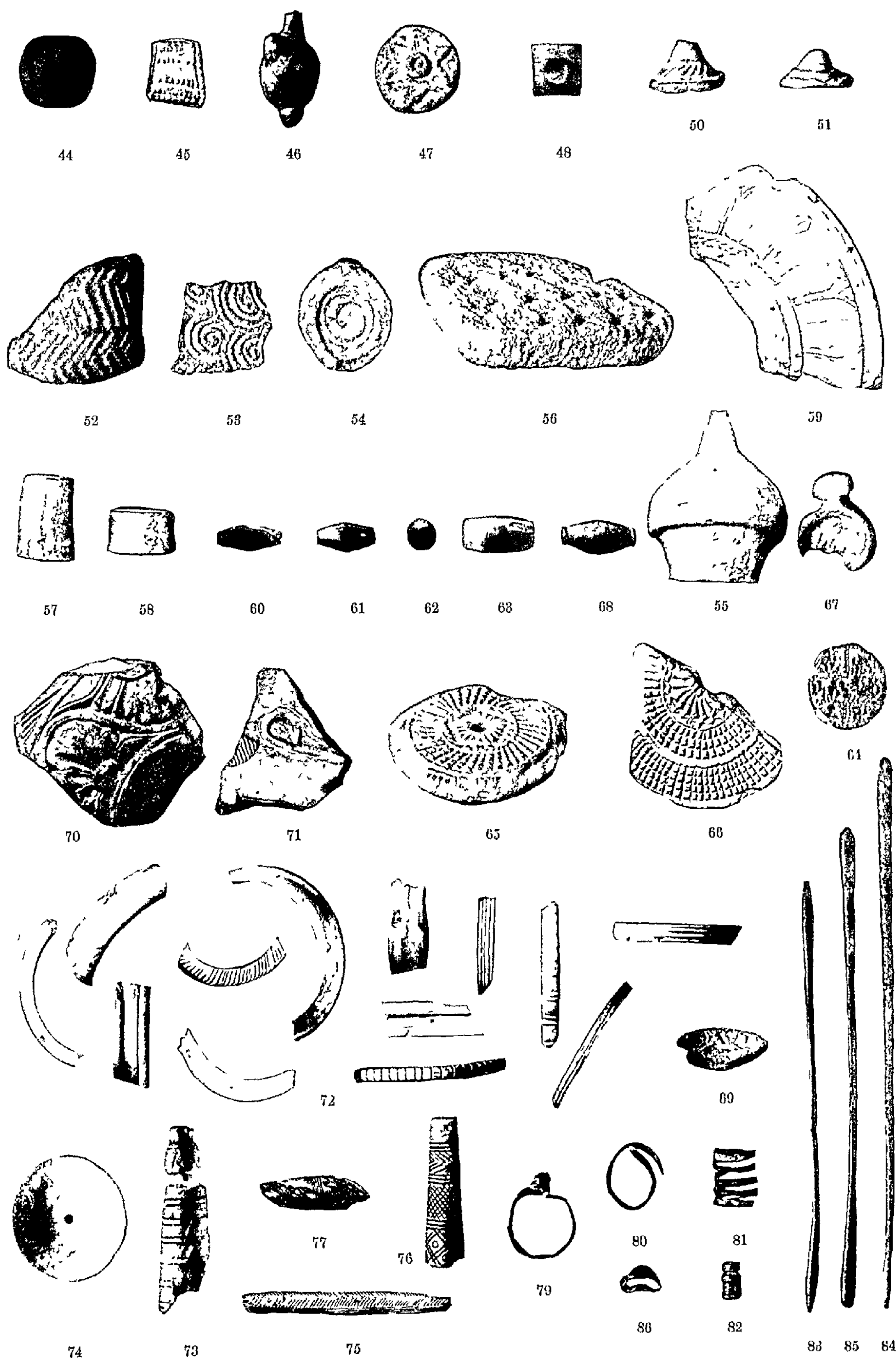
62. Rough agate (?) bead, $\frac{5}{16}''$ diameter; round. Dark orange colour with a bluish tint.

EXCAVATIONS AT BESNAGAR.



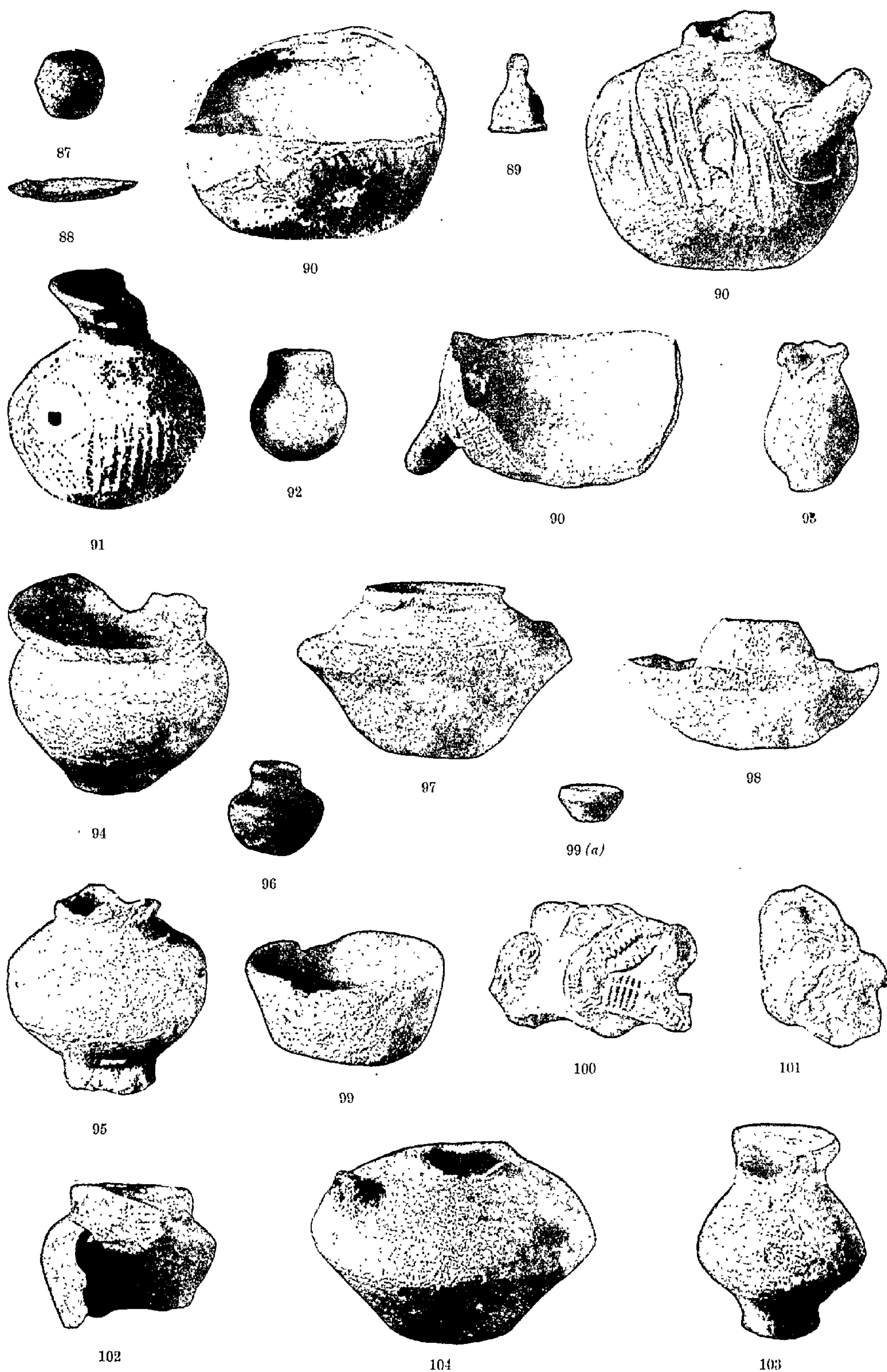
TERRACOTTAS

EXCAVATIONS AT BESNAGAR



DECORATIVE AND OTHER OBJECTS

EXCAVATIONS AT BESNAGAR.



POTTERY.

63. Agate bead, $\frac{13}{16}''$ long ; elongated. Dull brown colour with a white band at one end.

64. Circular bone seal, $\frac{7}{8}''$ diameter ; with small handle and reed border ; the engraving is in three rows divided by horizontal reeded lines. The upper and lower rows are each divided into two compartments by similar vertical lines. In the left upper compartment is Nandipada, in the left lower is a Svastika and in the right compartments are other symbols. In the central row are the letters: Dha(m)mam(i)tasa.

Ganeshpurā.

65. Terra-cotta die, 3″ diameter, with one side flat and carved, and the other convex and crowned with a fillet. The carved design consists of a pentagon encircled by a band of radiating dotted line intercepted by a circular line rim broken. A hole $\frac{1}{4}''$ in diameter is bored right up to the top. Light red clay.

66. Fragment of die, $3\frac{3}{4}''$ in diameter, similar in shape to No. 65, but with a different design. This consists of a flower in the centre encircled by two concentric bands of radiating dotted lines each intercepted by a circular ring. Black clay.

67. Fragment of terra-cotta mould (?) ornamented with a knob, $1\frac{1}{2}''$ high ; plain back and $\frac{3}{16}''$ deep sinking in the face. Buff clay.

68. Clay bead, $\frac{7}{8}''$ long ; elongated, with rimmed ends. Dark burnt clay.

69. Terra-cotta saucer, $1\frac{1}{2}''$ diameter, with carved inside. Buff clay.

70. Fragment of a stone halo, $2\frac{3}{4}'' \times 2\frac{1}{4}''$, decorated with floral patterns.

71. Flat piece of stone, carved with a lion, of which only a small portion now remains.

(4) *Shell bangles and ivory objects.*

Khām Bābā.

72. Fragments of decorated and plain bangles made of conch shell. White colour.

73. Fragment of a handle, $1\frac{1}{4}''$ long, with circular lines incised on lathe. Perhaps of ivory, white colour.

74. Thin round ivory piece ; $1\frac{1}{4}''$ diameter, with a small hole bored in the centre. Buff colour.

Ganeshpurā.

75. Elongated ivory piece, $3\frac{7}{16}''$ long and $\frac{3}{8}''$ wide, carved on three sides ; the fourth cut into a groove. Buff colour.

76. Piece of an ivory pipe, $2\frac{1}{4}''$ long, with surface well carved. Partly broken. Buff colour.

77. Flat ivory piece, 2″ long, with a hole bored near one end and a groove cut on the reverse ; resembles a flat wooden board used as a cover to a palm-leaf manuscript. Buff colour.

(5) *Metallic objects.*

KHĀM BĀBĀ.

78-79. Copper finger rings, both alike, with a central knob.

80. A copper finger coil.

81. Brass spiral finger ring, $\frac{11}{16}''$ diameter.

82. Cylindrical piece of copper, $\frac{9}{16}''$ long and $\frac{1}{4}''$ diameter with some moulding in the centre.

83. Copper rod, $4\frac{1}{2}''$ long, $\frac{1}{8}''$ thick at the ends, commonly supposed to be an antimony stick.

GANESHPURĀ.

84. Copper rod, $5\frac{3}{16}''$ long, pointed at one end and thick at the other. Of similar use as No. 83.

85. Another copper rod, $4\frac{7}{8}''$ long, thinner in the centre and thicker at the ends. Used like Nos. 83 and 84.

86. Copper ring with flat round carved seal, $\frac{7}{16}''$ diameter.

87. Iron bead, $1\frac{1}{4}''$ diameter, flattened at both ends.

88. Thin brass saucer, $2\frac{1}{8}''$ diameter.

89. Copper bell, $1\frac{1}{4}''$ high, with a ring at the top.

(6) *Pottery.*

KHĀM BĀBĀ.

90. Fine specimen of a pot, $4\frac{1}{2}''$ diameter, with top broken; round the centre of the pot is carved a band $1\frac{1}{2}''$ high, from which springs a spout. Light red clay with reddish slip.

91. Earthen pot, $3\frac{1}{2}''$ high, with a narrow neck and a funnel-shaped mouth partly broken, spout completely gone. Same material and colour as of No. 90.

92. Small pot, $1\frac{1}{2}''$ high; contained seven silver coins of Kalachūri dynasty (*vide* pp. 172 and 174). Light red clay with thin reddish slip.

93-96. Pots of other shapes and sizes. No. 96 is of black and the rest of dull red clay.

97. Earthen pot, $2\frac{1}{2}''$ high, with two rims; lower rim broken. Light red clay.

98. Lid of an earthen jar, $2''$ high, with an inkstand like projection in the centre. Material same as above.

99. Shallow earthen bowl $1\frac{3}{8}''$ high. Buff red clay.

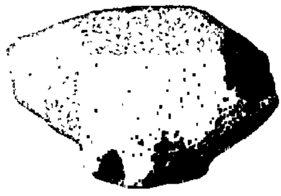
99(a). Small earthen lid cup, $\frac{7}{16}''$ high. Buff clay.

100. Khuja gargoyle $3\frac{1}{4}''$ long with outlet and crocodile mouth. Light red clay.

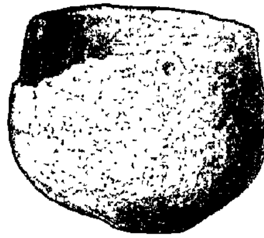
101. Another Khuja gargoyle, much broken. Material same as above.

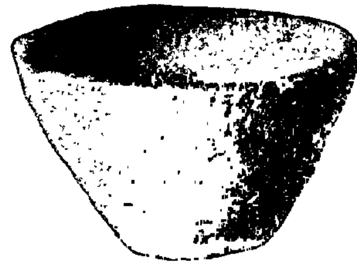
102. Earthen pot, $3\frac{1}{4}''$ high, covered with copper sheet lining. Black clay.

EXCAVATIONS AT BESNAGAR.


105

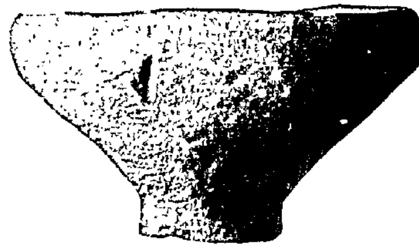

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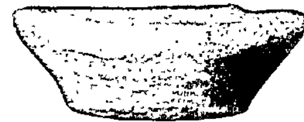

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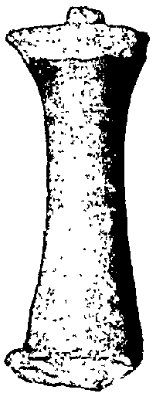

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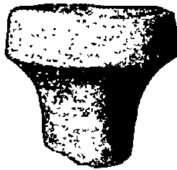

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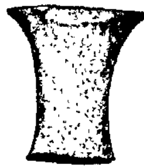

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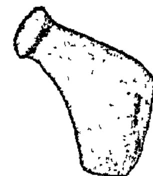

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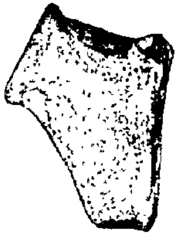

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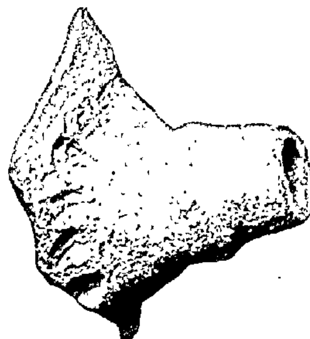

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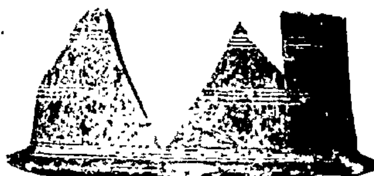

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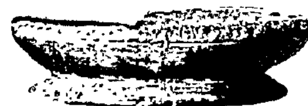

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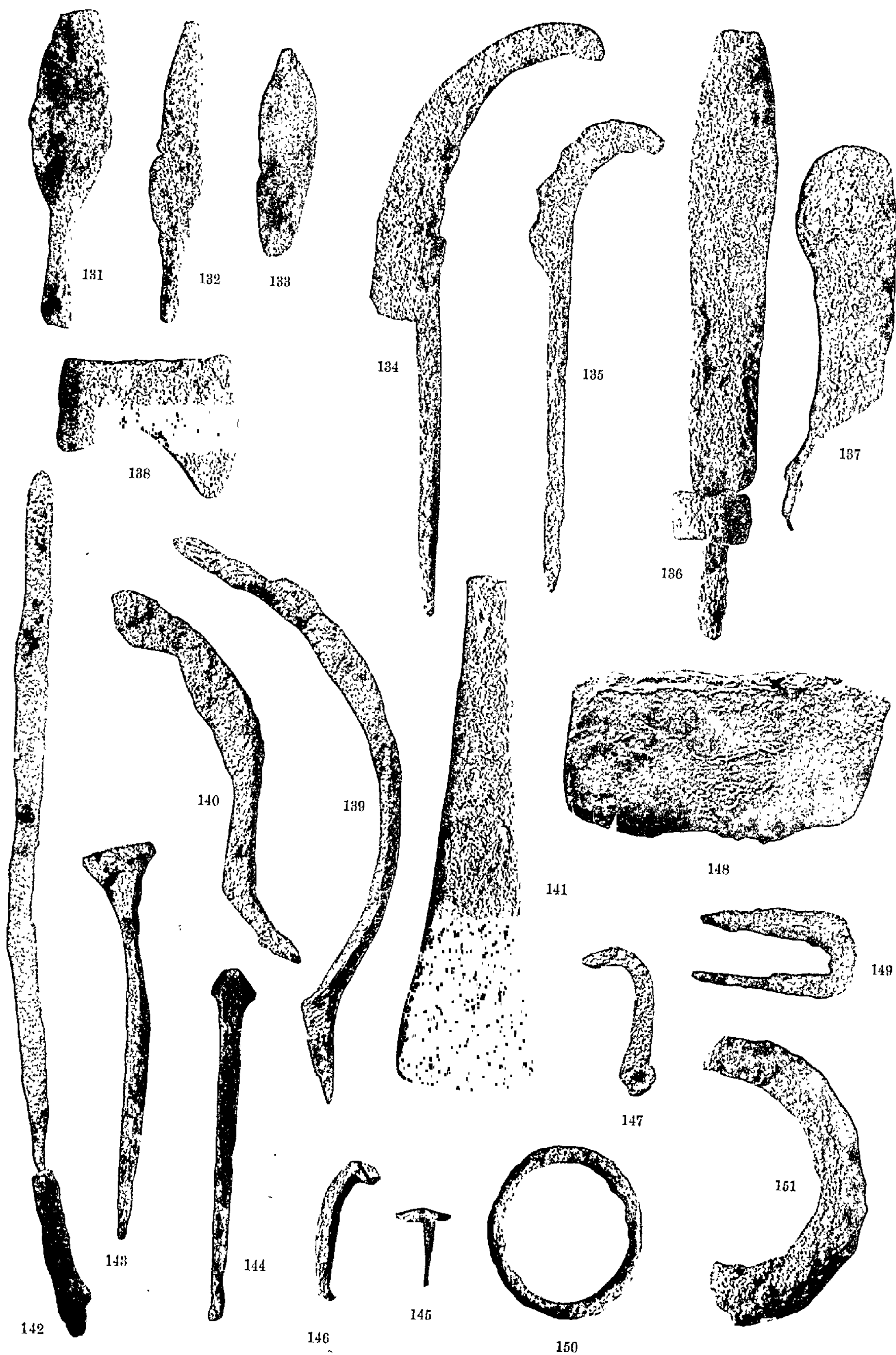

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129


130

POTTERY AND STONEWARE.

EXCAVATIONS AT BESNAGAR.



IRON IMPLEMENTS

GANESHPURĀ.

103. Earthen *gadua*, $2\frac{3}{4}''$ high; contained one *kārshāpaṇa*. Red clay.

104. Earthen *karua*; top and spout broken.

105. Unidentifiable oval-shaped earthen object, perhaps part of some toy bird. $1\frac{3}{4}''$ high, with a hole at the top and a perforation below. Red clay.

106. Tiny earthen *surahi*, $1\frac{3}{4}''$ high, with incisions on the surface. Buff clay.

107-110. Earthen cups of different shapes and sizes.

111. Broad-mouthed broken cup, with a lotus carved at the bottom on the outside surface. Buff clay.

112. Earthen *chiragh*, $2\frac{1}{4}''$ diameter.

113-116. Khuja necks of different types. Red clay.

117-121. Khuja spouts of different shapes and sizes. Red clay.

122. Khuja spout with carving and moulding. Red clay.

123. Conical earthen piece, probably used as a paper weight.

124-125. Earthen finials of different types.

126. Round paper weight with cylindrical handle, partly broken. Red clay.

(7) *Stone ware.*

GANESHPURĀ.

127. Broken steatite lid, $2\frac{3}{4}''$ high and $5''$ diameter; the upper surface is decorated with three concentric circles and the exterior of the neck with three bands each of four incised lines. Mottled grey stone.

128. Steatite saucer, $\frac{7}{8}''$ high and $3\frac{5}{8}''$ diameter. Colour same as of the above.

129-130. Bone pencils.

(8) *Iron weapons and implements.*

KHĀM BĀBĀ.

131-133. Arrow heads.

134-135 Sickles (?).

136. Knife, $7\frac{3}{8}''$ long, with a ring.

137. Another knife, $4''$ long.

138. Axe, $2\frac{1}{2}''$ long.

139-140. Broken sickles (?).

141. Stone dressing chisel, $6\frac{3}{4}''$ long.

142. Iron bolt, $13\frac{1}{2}''$ long.

143-145. Iron nails of different lengths and heads.

146-147. Iron hooks.

148. Wedge, $4\frac{1}{2}''$ long by $2''$ broad.

149. Staple, $2\frac{1}{4}''$ long.

150. Round ring, $2\frac{1}{8}''$ diameter.

151. Fragment of iron ring, $4\frac{1}{2}''$ diameter and $1''$ thick.

KARSHAPANA COINS FOUND AT BESNAGAR.[1]

(1) *Khām Bābā.*

Serial No.	Weight in grains.	Obverse.	Reverse.
		CLASS I.	
1	40	Two human figures; symbols No. 13, 15; and a part of Symbol No. 1.	Symbol No. 21. (Plate LXIV. No. 16.)
2	36	Symbol No. 15; human figure (?); two umbrellas (?); part of symbol No. 14 (?).	Symbol No. 21. (Plate LXIV, No. 19.)
3	28	Symbols No. 15, 14; part of symbol No. 2? Human figure.	Symbol No. 21. (Plate LXIV, No. 15.)
4	25-5	Symbols No. 15, 14; part of No. 2 (?) Symbol No. 21 (?).	Symbol No. 22. (Plate LXIV, No. 17.)
5	24	Human figure (?); symbol No. 15; part of No. 1 and No. 2.	Symbol No. 21 (?).
6	15	Symbols No. 15 (?), 16 (?); human figure (?)	(?) (Plate LXIV, No. 21.)
7	15	Symbols No. 15, 14 (?); part of symbol No. 2; and human figure (?).	
8	14-5	Symbols No. 15, 20; and human figure (?)	Symbol No. 21 (?). (Plate LXIV, No. 13.)
9	14	Symbols No. 15, 14; tree in railing (?). Part of symbol No. 2 (?) and human figure (?).	(Plate LXIV No. 14.)
10	13	Symbol No. 15; Taurine (?). Human figure (?).	
11	12	Symbols No. 15; 14; part of No. 2 (?); Human figure.	Symbol No. 23.
12	11-5	Symbol No. 15: symbol No. 8 (?); part of symbol No. 2 (?); human figure.	Symbol No. 21 (?)
		CLASS II.	
13	38½	Symbols No. 7, 14, 8 reversed; river with fish.	Symbol No. 5. (Plate LXIV, No. 31.)
14	33-5	Symbols No. 7, 14, and 8 (?) . . .	Symbol No. 5. (Plate LXIV, No. 23.)
15	28	Symbols No. 7; 8; 14	Symbol No. 5. (Plate LXIV, No. 28.)

[1] Coins, if not otherwise specified, should be considered to be of copper and roughly rectangular in shape. The symbols referred to in these columns are figured on Plate LXVI.

Serial No.	Weight in grains.	Obverse.	Reverse.
		CLASS II—*contd.*	
16	27·5	River with fish ; symbols No. 7, 8 ; and 14 .	Symbol No. 5. (Plate LXIV, No. 29.)
17	25·5	Symbols No. 7, 8, 14	Symbol No. 5.
18	25	River with fish ; symbols No. 7, 8, 14 .	Symbol No. 5. (Plate LXIV, No. 30.)
19	20·5	Symbols No. 7, 8, 14 (and river with fish ?).	Symbol No. 5.
20	20	(Metal, lead.) Symbol No. 7 . .	(Plate LXIV, No. 27.)
		CLASS III.	
21	40	Symbol No. 12	(Plate LXIV, No. 1.)
22	33·5	Symbol No. 12	(Plate LXIV, No. 2.)
		CLASS IV.	
23	43	Tree in railing (No. 17, symbol) ; symbols No. 6, 13 ; and taurine.	An elephant (Plate LXIV, No. 24), taurine ; and symbol No. 9.
		CLASS V.	
24	147½	Tree in railing ; lotus ; river with fish and tortoise ; elephant ; symbol No. 10 (with taurine at the top) in railing.	(Plate LXV, No. 2.)
25	136	A horse ; an elephant ; river with fish and tortoise ; symbol No. 1 with four taurine symbols.	(Plate LXV, No. 3.)
26	136	River with fish ; tree in railing (symbol No. 18) ; symbol No. 10 (with taurine at the top) in railing No. 17 ; symbol No. 4 ; horse.	(Plate LXV, No. 9.)
27	114	River with fish and tortoise ; symbol No. 9 in No. 17 ; elephant ; symbols No. 1 and 3.	(Plate LXV, No. 13.)
28	111·5	Rive· with fish and tortoise. Symbol No. 9 in railing No. 17 ; elephant ; symbols No.·11 and 14.	(Plate LXV, No. 1.)
29	107	Elephant, symbol No. 2 ; No. 3 ; symbol No. 9 in railing ; and symbol No. 14.	(Plate LXV, No. 18.)

Serial No.	Weight in grains.	Obverse.	Reverse.
		CLASS V—*contd.*	
30	103	River with fish and tortoise; symbol No. 9 in railing No. 17; elephant; symbols No. 14 and 2.	(Plate LXV, No. 11.)
31	75	River with fish and tortoise: tree (in railing ?); lotus; symbol No. 10 in railing and No. 4.	(Plate LXV, No. 20.)
32	71	River with fish and tortoise and crocodile (?), lotus; tree in railing (18). Symbol No. 10 (with taurine at the top) in railing (17) and symbol 14.	(Plate LXV, No. 7.)
33	70	Tree in railing (much worn)	
34	65-5	Elephant. Symbol No. 14 (?) and tree (?)	Faint lotus.
35	63-5	River with fish; elephant; lotus flower; symbol No. 9 in railing (17) (?, and No. 14.	Lotus flower.
36	61	River with fish and tortoise; tree in railing: elephant; symbol No. 9 in railing; and symbol No. 11.	(Plate LXV, No. 17.)
37	61	Elephant; lotus; river with fish; symbol No. 9 (reversed) in railing; and symbol 14.	Lotus.
38	58	Symbol No. 9 (?) symbol No. 14 ? .	Lotus.
39	56	River with fish and tortoise; lotus flower; tree in railing (symbol No. 18); symbol No. 10 in railing (symbol No. 17); and symbol No. 4.	(Plate LXV, No. 21.)
40	48 5	Elephant: river with fish; tree in railing; lotus and symbol No. 10 in railing.	(Plate LXV, No. 19.)
41	43	Symbols No. 1; 9; and 14	(Plate LXV, No. 12.)
42	29-5	Tree in railing; symbol No. 9 in railing; river with fish and Nandipada.	
43	28	Tree in railing (symbol No. 17): river with fish; Nandipada; Svastika; symbol No. 8; and No. 11.	(Plate LXIV, No. 3.)
44	23	Two (?) rivers with fish; tree in railing .	Elephant. (Plate LXIV, No. 12.)
45	18-5	Tree in railing; river with fish; symbol No. 2; symbol No. 8 in railing (?)	(Plate LXIV, No. 7.)

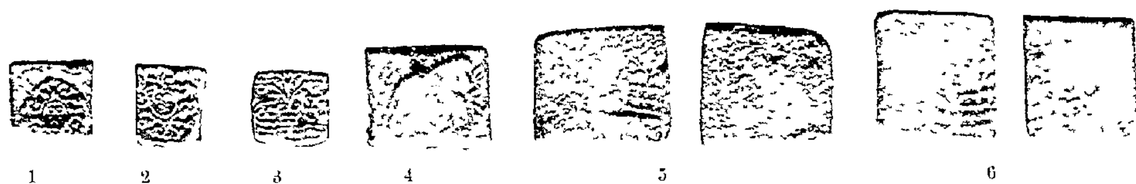
Serial No.	Weight in grain.	Obverse.	Reverse.
		CLASS V—*concld.*	
46	14·5	River with fish; tree in railing; symbol No. 14; and No. 13 (with tree ?).	Four Nandipadas around symbol No. 16. (Plate LXIV, No. 9)
47	8	River with fish and tortoise; symbol No. 1 and head of an elephant (?).	
		CLASS VI.—(*Miscellaneous.*)	
48	88	Lion with mane	(Plate LXIV, No. 4.)
49	19·5	(Round.) Five dots	Four points with a line in the centre joining two opposite points. (Plate LXIV, No. 34.)
50	10·5	(Round.) Sea dragon (?) . . .	A shaft; river (?) (Plate LXIV, No. 35.)
51	7	(Round.) Lion (?)	(?) (Plate LXIV, No. 33.)

(2) *Ganeshpurā.*

Serial No.	Weight in grains.	Obverse.	Reverse.
		CLASS I.	
1	16·5	Human figure; part of symbol No. 2 (?); symbols No. 14, 15.	Symbol No. 21. (Plate LXIV, No. 20.)
2	15·5	Lotus flower. Symbol No. 14 (?); taurine; and a scroll.	Symbol No. 21. (Plate LXIV, No. 18.)
3	13	Taurine; part of human figure; and symbol No. 15.	
		CLASS II.	
4	22	Symbol No. 7	Symbol No. 5.
5	18	Symbols No. 7 and 14	Symbol No. 5.

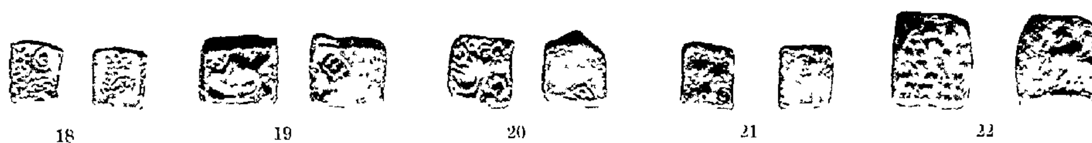
Serial No.	Weight in grains.	Obverse.	Reverse.
		CLASS III.	
6	50	Symbol No. 12	
		CLASS IV.	
7	51	Tree in railing ; symbols No. 6 and 13 .	Elephant. Symbol No. 8 (?).
8	39·5	Tree in railing ; symbol No. 6 taurine ; and symbol No. 13.	Elephant ; (symbol No. 8 : (Plate LXIV, No. 22) taurine and svastika.
9	37·5	Taurine ; tree (?) in railing (?) ; symbol No. 6.	Elephant ; Nandipada ; taurine (?) and symbol 8.
10	37·25	Tree in railing (17) ; taurine symbols No. 6 and 13.	Elephant ; svastika ; taurine ; symbol No. 9. (Plate LXIV, No. 26.)
11	36·5	Tree in railing ; taurine ; symbols No. 6 and 13.	Elephant ; taurine : crocodile (?) and symbol No. 8 (?). (Plate LXIV, No. 25.)
		CLASS V.	
12	215	River with fish and tortoise ; symbol No. 4 ; tree in railing (18), symbol No. 10 in railing with taurine at the top.	(Plate LXV, No. 4.)
13	147·5	River with fish ; symbol No. 9 in railing 17 ; elephant ; symbols No. 11 and 14.	
14	115	Tree in railing 17 ; bull (lion ?) standing with forefoot slightly raised.	Four Nandipadas round a circle. (Plate LXIV, No. 5.)
15	101·5	Tree in railing ; bull (or lion ?) standing .	Four Nandipadas round a circle. (Plate LXIV, No. 6.)
16	95·5	River with fish ; symbol No. 9 in railing 17 ; elephant symbols Nos. 11 and 14.	(Plate LXV, No. 6.)
17	74·5	River with fish and tortoise ; elephant ; horse, symbol No. 4.	(Plate LXV, No. 8.)
18	72·5	River with fish and tortoise ; tree in railing ; symbol No. 9 in railing (17) ; elephant and symbol No. 11.	(Plate LXV, No. 16.)

EXCAVATIONS AT BESNAGAR.


1 2 3 4 5 6


7 8 9 10 11 12


13 14 15 16 17


18 19 20 21 22


23 24 25 26

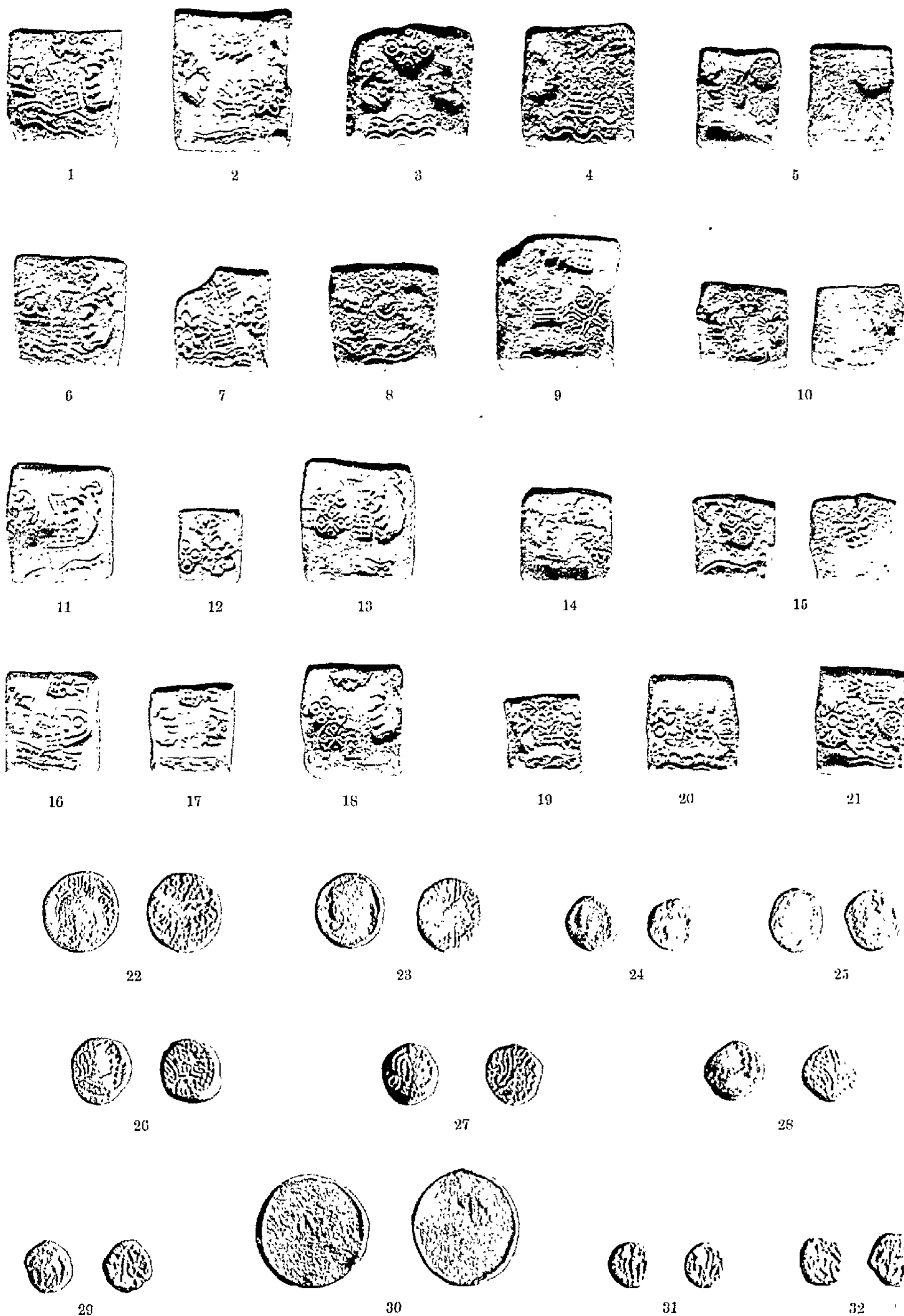

27 28 29 30 31


32 33 34 35 36

COINS.

Photo Engraved & printed at the Offices of the Survey of India Calcutta

EXCAVATIONS AT BESNAGAR.



Coins.

Photo-Engraved & printed at the Offices of the Survey of India Calcutta, 1914

Serial No.	Weight in grains.	Obverse.	Reverse.
		CLASS V—*contd.*	
19	70	Lotus; tree in railing; river with fish; symbol No. 4 (?).	
20	57	Elephant; lotus; symbol No. 14; symbol No. 9 in railing (17), river with fish.	Lotus. (Plate XV, No. 10.)
21	55·5	River with fish; lotus; elephant; symbol No. 8 in railing (17) and symbol No. 14.	Lotus.
22	55	River with fish; symbol No. 2 . .	Tree in railing (17). (Plate XV, No. 15.)
23	54	River with fish; elephant; lotus; symbol 8 in railing (17); and symbol No. 14.	Lotus. (Plate XV, No. 5.)
24	53·5	River with fish; lotus; elephant (horse ?) symbol No. 8; in railing (?); tree in railing (?)	(Plate XV, No. 14.)
25	41	River with fish; tree in railing; symbol No. 14.	
26	33·5	Tree in railing; tree coming out from symbol No. 13; lotus; river with fish (?)	Four Nandipadas round symbol No. 16. (Plate XIV, No. 10.)
27	32·5	Tree coming out from symbol No. 13 .	(Plate XIV, No. 11.)
28	32·5	Symbol No. 14; and No. 9 (?) . .	
29	31·5	Elephant; lotus; river (?) symbol No. 14 .	Lotus.
30	14	Tree in railing (17); lotus; taurine; svastika; and symbol No. 8.	Elephant. (Plate LXIV, No. 8.)
		CLASS VI.—*Miscellaneous.*	
31	11·5	Standing bull	Lotus; svastika and symbol No. 8. (Plate LXIV, No. 32.)
32	9	(Round). Lotus	(Plate LXIV, No. 36.)

APPENDIX.

See p. 210 ff.

यथा हि हेरञ्ञिकफलके ठपितं कहापणरासिं एको अजातबुद्धिदारको एको गामिकपुरिसो एको हेरञ्ञिकोति तीसु जनेसु पस्समानेसु अजातबुद्धिदारको कहापणानं चित्तविचित्तदीघचतुरस्स-पारिमण्डलभावमत्तमेव जानाति। इदं मनुस्सानं उपभोगपरिभोगं रतनसंमतंति न जानाति। गामिकपुरिसो चित्तविचित्तादि भावं जानाति इदं मनुस्सानं उपभोगपरिभोगं रतनसंमतं ति च। अयं छेको अयं कूटो अयं अड्ढसारोति इदं पन विभागं न जानाति। हेरञ्ञिको सव्वेपि ते पकारे जानाति जानन्तो च कहापणं ओलोकेत्वापि जानाति आकोटितसद्दं सुत्वपि गन्धं घायित्वापि रसं सायित्वापि हत्थेन धारयित्वापि असुकस्मिं नाम गामे वा निगमे वा नगरे वा पब्बते वा नदीतीरे वा कतो ति पि असुकाचरियेन कतो ति पि जानाति।—*Visuddhimagga, 14th Parichchheda.*

D. R. BHANDARKAR.

1 12

2 13

3 14

4 15

5 16

6 17

7 18

8 19

9 20

10 21

11 22

23

a, Symbols on Coins found at Besnagar.

ONE	
TWO	
THREE	
FOUR	
FIVE	
SIX	
SEVEN	
EIGHT	
NINE	
TEN	
TWENTY	
THIRTY	
FORTY	
FIFTY	
SIXTY	
SEVENTY	
EIGHTY	
NINETY	
ONE HUNDRED	
TWO HUNDRED	

b, Signs of Numerals on Coins from Sarvania.

KSHATRAPA COINS FROM SARVĀṆIĀ.

THE hoard of coins described in the following pages was found at Sarvāṇiā in the Kalingṛā Ṭhāṇā of the Bānswāṛā State, Rājputānā. The circumstances which led to the discovery of this hoard are, curiously enough, not unlike those connected with the Nāsik (Joghalṭembhī) hoard of Nahapāna's coins. On the 7th December, 1911, some children were engaged in playing a game at the foot of a small hill outside the village site and lighted upon a copper vessel underground. The story of the find spread through the village and reached the ears of the Paṭel (headman) of Sarvāṇiā and the Ṭhānedār of Kalingṛā, who hastened to the spot and took out the vessel. On counting it was found to contain 2,407 coins. These were eventually forwarded to Rai Bahadur Gaurishankar Ojha, Superintendent, Rajputana Museum, Ajmer, for report. "The coins when received here," says he, "were so rusty that it was quite impossible to decipher inscriptions on them, except on about a dozen which had been cleaned in Banswara. The rust coating on some of the coins was so thick that they were taken to be two coins stuck together, but on cleaning them I found that the upper one, which was thought to be a coin, was nothing but a coating of rust and the actual number of coins was therefore reduced to 2,393."

Pandit Gaurishankar Ojha, to whom the coins were first sent, examined them with the help of Pandit Vishveshvarnāth of Jodhpur and arranged them into different packets according to the names and titles of the kings they bore. A statement of results so achieved has been published by him in his *Annual Report of the Rajputana Museum* for 1912-13. But, finding that it was a bare summary and was unaccompanied by any illustrations of the important coins, I thought it would be worth while to give a more detailed account of them. I therefore put myself in correspondence with the Kāmdār of the Bānswāṛā State, who very kindly sent the hoard for my examination. When I inspected it, however, I came to know that some coins of the original hoard had been presented to the Rajputana Museum. As these could not be dispensed with in a critical examination of the hoard, I applied for their loan to the Commissioner of Ajmer, and I owe it to his kindness that they were readily placed at my disposal. But another disappointment also awaited me. Somehow the packets into which Pandit Gaurishankar had so carefully sorted the coins had broken open at the corners and more than half the hoard had got mixed up. There was no course left but for me to reclassify them—by no means an easy task; and with the very limited leisure at my

disposal I was despairing of being able to cope with it when Mr. K. N. Dikshit, Assistant Curator, Prince of Wales Museum, Bombay, came to my assistance. He did this work thoroughly and accurately, and I cannot help saying that without his co-operation I should have been compelled to give up the idea of publishing this account. A second examination of this hoard by us, as must often happen in the case of large hoards, has necessitated a good many alterations in Pandit Gaurishankar's classification of the coins and deciphering of dates. It has also revealed the interesting fact that the hoard contained one coin of Saṅghadāman, son of Mahākshatrapa Rudrasiṁha I, which had previously escaped attention. The classes (V), (W) and (X) in which Pandit Gaurishankar placed the uncertain coins of the hoard, have, it will also be seen, been greatly modified.

The present is the first hoard of Western Kshatrapa coins so far discovered in Rājputānā. A few stray coins of the earliest Kshatrapa Kings, *viz.*, Nahapāna, Bhūmaka, Chashṭana and Rudradāman I, are known to have been found at Pushkar near Ajmer. Two coins—one of *Atri Dama* (Bhartṛidāman) and one of *Asa Dama* (Yaśodāman) were found by Carlleyle at Nagarī, 11 miles north of Chitorgaḍh, Mewāṛ.[1] Beyond these no coins of any earlier or later Kshatrapa ruler have come to light in Rājputānā. It had, therefore, been somewhat doubtful whether any part of this province ever owned their sway. The Sarvāṇiā hoard, however, conclusively proves that the southern part of Rājputānā at any rate was held by them.

This hoard bears a close resemblance in one important respect to that found at Uparkoṭ nearly 17 years ago and so ably described by Rev. Mr. H. R. Scott. It is true that the earliest prince in the Sarvāṇiā hoard is Rudrasiṁha I, whereas that in the Uparkoṭ find is his son Rudrasena I. But the last prince whose coins have been found is the same in both, *viz.*, Rudrasena III. Secondly, it is worthy of note that all the coins of this ruler in the Sarvāṇiā as in the Uparkoṭ collection belong to the earlier period of his coinage separated from the later by at least a dozen years. The view first proposed by Mr. Scott and afterwards upheld by Professor Rapson, *viz.*, that this interval, not a single coin pertaining to which was found, was marked by a political disturbance, and that the Uparkoṭ hoard was "secreted at the end of the first period of Rudrasena's reign," life and property having become insecure, receives a remarkable confirmation from the Sarvāṇiā hoard which also was buried at the close of the earlier period of Rudrasena's rule. The fact, again, that both Uparkoṭ and Sarvāṇiā, the find spots of these hoards, are separated by a long distance, shows that this political revolution affected not simply one province but the whole of the Kshatrapa kingdom.

No less than six coins of the Mahākshatrapa Īśvaradatta are contained in our hoard. All Kshatrapa coins give the name and title of the father along with those of the ruler, and, when they are dated, they specify years which belong to one and the same era. Īśvaradatta's coins, however, do not tell us who and what his father was, and the dates specified on them are years of his reign and not of the Kshatrapa (Śaka) era. Hence to assign him his place in the order of the Kshatrapa succession has become a somewhat difficult matter. According to Pandit Bhagwanlal Indraji, his first year corresponded with A. D. 249, the initial date of the so-called Traikūṭaka era.

[1] Cunningham's *Archæol. Surv. Rep.*, Vol. VI, pp. 200-1.

The fact that his recorded coins belong to only two years and the absence of Kshatrapa coin dates between the years 171 (A. D. 249) and 176 were adduced in support of it. Further discoveries of coins since Bhagwanlal's time have, however, proved that there was no such break and the dates run continuously between 171 and 176. Professor Rapson places Īśvaradatta between 158, the last recorded year of the M. K. Dāmasena, and 161, the earliest known date for his son and successor the M. K. Yaśodāman I, and bases his conclusion on (1) the palæography of the legend on the coin reverse, (2) the style of the portrait, and (3) the treatment of the eye in the bust. Now, in the first place, our hoard supplies a date, *viz.*, 160, for this Yaśodāman, which is one year earlier than his earliest recorded date, and thus lessens the gap between him and his predecessor by at least one year. It is still not impossible to adjust the two years of Īśvaradatta's reign even in this lessened gap, *viz.*, between 158 and 160 but just as the gap between 171 and 176, which was imagined by Bhagwanlal, no longer exists, a day will, no doubt, come when with the further find of coins the gap between 158 and 160 now existing will also be completely filled. His argument based on palæography Professor Rapson sets forth as follows : " In his (*i.e.* Īśvaradatta's) coin-legend the form of the *akshara ksha* is later than 130 ; and the rounded form of *pa* is not later than about the year 160, when it begins to give way to the pointed form." In *Jour. R. As. Soc.* for 1899, p. 386, he tells us that the peculiarity of this *ksha* consists of " a very distinct sharp curve at the bottom." I am afraid I cannot concur in this argument. In the first place, the form of *ksha* given by this numismatist as an illustration does not correspond with that of *ksha* occurring in Īśvaradatta's coin-legends. Secondly, some *kshas* in the legends of even Rudrasiṁha's coins (103-118) are not without the sharp curve just alluded to. Thirdly, the reverse legends on Īśvaradatta's coins present not only the round but also the pointed form of *pa*, and, fourthly, the pointed form of *pa* is found even in those of Rudrasiṁha. Thus in my view palæography fails to support the *terminus a quo* proposed by Professor Rapson for Īśvaradatta, who may, as a matter of fact, have lived even as early as the period ascribed to Rudrasiṁha. Professor Rapson's second argument, based on the type of the bust on the obverse, I also find open to objection. He argues, that Īśvaradatta's portrait " bears a strong resemblance to those of Vīradāman (156-60), Yaśodāman I (160-1), and Vijayasena (160-172)." This, no doubt, is true ; but it is also true that every ruler in this series of Kshatrapa coins is represented by two or three different types of portrait. From Professor Rapson's third argument, *viz.*, that concerning the treatment of the eye, it is permissible, I think, to deduce a conclusion somewhat different from his. It is true that the treatment of the eye in Īśvaradatta's portrait is that which prevails during the period from about 127 to 170. But this does not necessitate the inference, as Professor Rapson draws, that he lived somewhere between 127 and 170. It is possible that he may have lived somewhat earlier than 127 and that the representation of the eye peculiar to this period may have originated with his coinage. To this line of argument it will perhaps be objected that, if Īśvaradatta had really flourished in 110-2, the treatment of the eye noticeable on his coins would have been copied by Rudrasiṁha and Rudrasena from 113 to 125, during which period it is conspicuous by its absence. I reply that Professor Rapson has not exhausted all the methods adopted in the representation of the eye and that the coins

of Rudrasiṁha and Rudrasena of our present hoard present at least three varieties not noticed by him. It is quite plausible to assume that the method adopted in Īśvaradatta's coins may with further discoveries be found also on those of Rudrasiṁha and his son. Personally, I am inclined to assign Īśvaradatta to the years 110-112, which was the period of Rudrasiṁha's degradation to the subordinate position of Kshatrapa. Rudrasiṁha is known to have reigned (1) as Kshatrapa, for the first time, in the years 102-3 ; (2) as Mahākshatrapa, for the first time, from 103 to 110 ; (3) as Kshatrapa, for the second time, from 110 to 112 ; and (4) as Mahākshatrapa, for the second time, from 113 to 118. It is perfectly intelligible that, when during 102-3 he was Kshatrapa, he must have been subordinate to his Mahākshatrapa predecessor. But why could he have fallen from his rank as Mahākshatrapa, when he had once attained it and become Kshatrapa again and continued to be so from 110 to 112 ? Professor Rapson accounts for it by assuming a struggle for supremacy between Jīvadāman and Rudrasiṁha. I am sorry I cannot bring myself to hold this view. The dates accepted for Jīvadāman are 1[00], *119 and 120, and hence it is* argued by him that Jīvadāman was a Mahākshatrapa in 100 and also in 102-3, when Rudrasiṁha was Kshatrapa ; that his power suffered a temporary diminution from 103 to 110, when Rudrasiṁha was M. K. ; that he regained his supreme power in 110-112, when Rudrasiṁha was reduced to the position of Kshatrapa ; that Jīvadāman was for the second time eclipsed from 113 to 118, when Rudrasiṁha in turn regained the rank of M. K. but that he again rose to chief power and held it from 119 to 120. It is, however, to be remembered that all these conclusions rest on the date, 100, accepted for Jīvadāman. But this date is highly problematic. Professor Rapson himself admits it and says that " Only traces of the 100 figure are now visible ; but there is nothing to show that a decimal and a unit figure were not also intended." And it is quite possible that the date intended here was 118 or 119. No probable conclusions even can be based on such a doubtful date. Secondly, if Jīvadāman was M. K. during 100-3 and 110-12, as contended by Professor Rapson, it is exceedingly strange that not a single coin of his has been found bearing the date 101, 102, 103, 110, 111 or 112. The fact that none of these dates, which, be it remembered, are no less than six, has so far been traced on his coins very much tends, in my opinion, to weaken the conclusion that Jīvadāman was Rudrasiṁha's predecessor in the M. K. rank, and that both had struggled for this position, temporarily eclipsing each other. The only certain dates for Jīvadāman, therefore, are 119 and 120. Jīvadāman thus had, in my opinion, nothing to do with the degradation of Rudrasiṁha to the rank of K. in 110-2, and I am inclined to ascribe it to the temporary supremacy of Īśvaradatta. Īśvaradatta has been supposed to be of Ābhīra extraction both by Pandit Bhagwanlal and Professor Rapson. This seems to be a very likely supposition, but this supposition can agree only with the date assigned by me to Īśvaradatta. For we have got an inscription in Cave X at Nāsik which refers itself to the reign of the Ābhīra king Īśvarasena, son of Śivadatta. With regard to the characters of this record, Bhagwanlal rightly remarks that " in form they greatly resemble the letters of Rudradāman's Girnār inscription (Kshatrapa era 72) or are perhaps a little later." This brings Īśvarasena of Nāsik inscription to *circa* 100 and also close to the M. K. Īśvaradatta whom I have assigned to 110-2. There can be no doubt that the Ābhīras had acquired great pre-

dominance about this time, for the Gunda inscription shows that in the year 103 and during the regime as Kshatrapa, of Rudrasiṁha himself the post of *senāpati* or commander-in-chief had been held by an Ābhīra called Rudrabhūti.

Another fact, though of somewhat lesser importance, which the hoard brings to our notice, is the unsafe character of the argument which tries to fix the age of different kings' coins from the degree of tear and wear which they have undergone. Curiously enough, in our hoard the earlier the coins are, the better preserved they are. The coins which look fresh from the mint, as a rule, belong to earlier Kshatrapa rulers. This very fact was emphasised by Mr. Longworth Dames during the memorable discussion that took place before the Royal Asiatic Society, London, on the date of Kanishka.[1]

(1) Rudrasiṁha, son of MK. Rudradāman I.

Coins as MK.

Undated.	Dated.	Illegibly dated.	Total.
..	4	..	4

Dated coins.

No.	Date.	No.	Date.	No.	Date.	No.	Date.
1	10[1]	1	1[05]	1	114	1	1[xx]

The reverse of the first coin does not contain the whole of the legend. Those of the second and the fourth present the variant *Rudradāmna putrasa;* while that of the third, *Rudradāmaputrasa*. Only one coin[2] of this king with the date 114 is known, but it has the first variant. The last three coins are in a fairly good state of preservation, but the first looks as if fresh from the mint. The dates on these coins in no way extend the range of Rudrasiṁha's reign already known from other sources, but the year 105 is a date for which no coin of his has so far been discovered.

(2) Rudrasena I., son of MK. Rudrasiṁha I.

Coins as K.

Undated.	Dated.	Illegibly dated.	Total.
..	1	..	1

[1] *Jour. R. As. Soc.*, 1913, p. 959.

[2] Rapson: *Catalogue of the coins of the Andhras, the W. Kshatrapas, etc.*, p. 92.

Dated coins.

No.	Date.
1	121

Coins as MK.

Undated.	Dated.	Illegibly dated.	TOTAL.
1	8	..	9

Pandit Gaurishankar assigns him ten coins, but on one the name of the king, whatever it was, is too worn to be read. As the date on it is1[xx], it also cannot help us to determine to what prince it belonged.

Dated coins.

No.	Date.	No.	Date.	No.	Date.
1	135	1[2]	142	1	14[x][4]
1[1]	139	1	1[x]2[3]	1	1[xx]

(3) SAṄGHADĀMAN, SON OF MK. RUDRASIṀHA I.

Only one coin of this prince has been found in this hoard. Pandit Gaurishankar through oversight included it in the lot assigned by him to Rudrasena I. The coin belongs to the time of Saṅghadāman as MK., and bears a date which probably is 144. His known dates are 144 and 145, and are of the period of his MK. rule. But Watson Museum, Rajkot, possesses a coin of Saṅghadāman as MK. with the date 149.

(4) DĀMASENA, SON OF MK. RUDRASIṀHA I.

Coins as MK.

Undated.	Dated.	Illegibly dated.	TOTAL.
..	12	..	12

[1] Fresh from the mint.
[2] The reverse is re-struck as shown by the dotted border and the letters *Kshatra* preserved of the original.
[3] The middle figure is 30 or 40.
[4] Unit figure 2 or 3.

Dated coins.

No.	Date.	No.	Date.	No.	Date.	No.	Date.
1[1]	150	1	152	2	155	4	15[x][4]
1	15[x][2]	1	1[x]4[3]	1	157	1	15[x]

(5) DĀMAJADAŚRĪ II, SON OF MK. RUDRASENA I.

Only two of his coins as Kshatrapa have been found, one dated 155 and the other 15[x]. The reverse of the former is very much worn, but the latter is in very good preservation. It is curious that no coins of his brother and predecessor K. Pṛithvīsena have been found, and, in fact, he is the only Kshatrapa from Rudrasiṁha I to Rudrasena III who is not represented in this hoard.

(6) VĪRADĀMAN, SON OF MK. DĀMASENA.

Coins as K.

Undated.	Dated	Illegibly dated.	TOTAL.
..	17	..	17

Dated coins.

No.	Date.	No.	Date.	No.	Date.	No.	Date.
2	158	3	15[x][5]	2	160	1	1[60][7]
1	159	1	15[x]	1	1[60][6]	6	1[xx]

Except one which is in excellent state of preservation, all the coins of this ruler are much worn out than those of his predecessors. The dates too, except in the case of five coins, are not well preserved.

(7) YAŚODĀMAN I, SON OF MK. DĀMASENA.

Six coins of this king were traced, of which two pertain to his rule as K. and four as MK. One of the former is dated 160, and the date on the other is illegible. Two of the latter bear the date 160, which is a new date (Plate LXVII coin No. 1) ; and

[1] The legend on the reverse is incomplete, and after *rajño* only *senasa* is visible, but no other king except Dāmasena is possible for this year.

[2] The date is probably 150, but it is not certain that no unit figure was intended.

[3] The decimal figure is possibly 50.

[4] Two of these have the unit figure between 1 and 3, and three between 5 and 9.

[5] Unit figure between 5 and 9.

[6] As the whole upper part of the date is gone, it is difficult to say that the date was not intended to be 161.

[7] The decimal figure is somewhat doubtful.

two, the date 16[x], though the strong probabilities are that in these last no unit figure was intended. It is not, however, clear how Pandit Gaurishankar got for him the certain date 161, in this hoard.

(8) Vijayasena, son of MK. Dāmasena.

Coins as K.

Undated.	Dated.	Illegibly dated.	Total.
..	10	1	11

Seven of the dated coins bear the date 160, one 16[1], and the remaining two 16[x]. The last three coins have been attributed to Vijayasena, because if they had belonged to any one of his brothers Vīradāman or Yaśodāman, the subscript *n* of the last syllable *mnaḥ* of their names would at least have been preserved. Besides, on one of these there are faint traces of *senasa*, the last three letters of *Vijayasenasa.*

Coins as MK.

Undated.	Dated.	Illegibly dated.	Total.
12	96	..	108

Dated coins.

No.	Date.	No.	Date.	No.	Date.	No.	Date.
1	161	3	165	9	168	12	170
2	162	6	166	1	16[8][1]	5	171
1	163	4	167	2	169	4	172
4	164	2	16[7][1]	33	16[x][2]	7	17[x]

The coins of Vijayasena are the first of any king in this hoard exceeding a hundred. They are generally in good preservation, and four or five, in particular, are fresh from the mint. The study of his coins in this hoard is interesting in more than one way. They present, in the first place, various cursive forms of the numerical signs current about the middle of the 3rd century A.D. Secondly, the Greek legend, which is more or less preserved on the obverse of every one of them, can be traced as

[1] Unit figure is somewhat doubtful.

[2] Of these the date on one is in all likelihood 165, on another 167, and on a third it may be either 167 or 169.

IIVIIOIICVΛZIIVO, and leaves little doubt that it contains the name of Vijayasena though in a corrupt form. Thirdly, it is noteworthy that, as correctly observed by Professor Rapson, the reverse inscription has *Dāmasenaputrasa* and *Dāmasenasa putrasa* on his coins as MK. and K. respectively.

Of the dates furnished by his coins the year 161 is entirely new and is the earliest for Vijayasena as MK. [Pl. LXVII coin No. 2.] The latest date we have for him as K. is 160, and the earliest hitherto known for him as MK. was 162; and Professor Rapson hoped for the find of Vijayasena's coins which would determine the precise year in which he passed from the position of K. to that of MK. His hope is now realised by the discovery of the date 161 when he certainly was MK.

(9) Dāmajadaśrī III, son of MK. Dāmasena.

Coins as MK.

Undated.	Dated.	Illegibly dated.	Total.
15	52	..	67

Dated coins.

No.	Date.	No.	Date.	No.	Date.	No.	Date.
2	17[2][1]	8	175	3	177	3	1[XX]
1	173	2	17[x][3]	1	17[x][4]		
2	174[2]	4	176	26	17[x][5]		

The year 177 is a new, and the latest certain, date for Dāmajadaśrī III. [Pl. LXVII coin No. 3.]

(10) Rudrasena II, son of K. Vīradāman.

Coins as MK.

Undated.	Dated.	Illegibly dated.	Total.
159	220	13	392

1 Unit figure probably 2, possibly 3.
2 Unit figure in one is not wholly preserved, but is sufficiently preserved to show that it can be no other than 4.
3 As unit figure is not sufficiently preserved, it is possible to read it both as 4 and 5.
4 Unit figure either 6 or 7.
5 In the case of ten of these, unit figure lies between 4 and 7.

Dated coins.

No.	Date.	No.	Date.	No.	Date.	No.	Date.
1	178	5	18[x][3]	3	189	1	194
2	179	1	18[x][4]	2	18[9][7]	1	197[11]
7	17[x][1]	6	184	27	18[x][8]	1	19[x][12]
1	17[x]	2[5]	185	28	18[x][9]	1	19[x][13]
5	180	4	186	4	18[x]	3	19[x][14]
1	18[1][2]	11[6]	187	1	190[10]	72	1[xx]
6	182	23	188	1	191		

So far as the number of his coins goes, Rudrasena II stands second among the kings whose coins have been found in the Sarvāṇiā hoard. The earliest and latest certain dates known for Rudrasena were so long 180 and 196 respectively. But from this hoard we obtain 178 as the earliest and 198 (or 199) as the latest date for him. [Pl. LXVII coin No. 5.] A still earlier date, *viz.*, 177, is furnished by a coin which I found during my excavations last year at Besnagar (the ancient Vidiśā) in Gwalior State. It is worthy of note that the last date for Dāmajadaśrī III, his predecessor, is also 177. It thus appears that the reign of Dāmajadaśrī III ended in 177 and that he was succeeded by Rudrasena in the same year.

(11) Viśvasiṁha, son of MK. Rudrasena II.

Coins as K.

Undated.	Dated.	Illegibly dated.	Total.
65	52	1	118

[1] Unit figure on two of these is 7 or 9, on one most probably 8. and on the rest uncertain.

[2] Unit figure, being just on the coin border, is not very clear.

[3] Unit figure is 2 or 3. In none of these coins the upper stroke of the unit figure is visible, though it can obviously be inferred. The third stroke is also possible; hence the doubt whether it is 2 or 3.

[4] If the third stroke of the unit figure is part of the Greek legend, the date is 182.

[5] The reverse of one of these coins has a double dotted border.

[6] One of them is in excellent preservation.

[7] Unit figure is probably 9.

[8] Unit figure 8 or 9.

[9] Unit figure between 4 and 9.

[10] It is impossible to say whether there was any unit figure or not.

[11] This date is clear, and cannot be 194 as read by Pandit Gaurishankar. [Pl. LXVII coin No. 4.]

[12] Unit figure most probably 7, and not 6 as read by Pandit Gaurishankar.

[13] Unit figure is 8 or 9, most probably the former, but certainly not 6 as read by the Pandit.

[14] Unit figure between 4 and 9.

Three of the undated coins are somewhat peculiar. One contains on the obverse the mark ⸸ punched on the cheek, ⸸ and another a number of irregular punch marks all over the bust of the prince, probably tokens of the different *Sarafs* or bankers through whose hands they passed. The third has the second word on the reverse legend *Mahākchhatrapa°* instead of *Mahākshatrapa°*. One of the undated coins, which has only *Rajñaḥ Kshatrapasa Viśva* preserved of the reverse legend, has been assigned to this prince and not to Viśvasena, first because this coin has the form *rajñaḥ* which occurs on Viśvasiṁha's coins only, those of Viśvasena presenting the form *rajña*, and secondly, because the representation of the eye on the bust of this coin is exactly like that on Viśvasiṁha's coins and is widely different from that found on those of Viśvasena.

Dated coins.

No.	Date.	No.	Date.	No.	Date.
1	197[1]	5	19[x][2]	1	1[xx]
1	198	1	19[x][3]	17	200
3	199	22	19[x]	1	[4][xx]2

The earliest certain date known for him as K. was 199. The dates 197 and 198 are, therefore, new, and make his rule as K. commence at least two years earlier.

Coins as MK.

Undated.	Dated.	Illegibly dated.	TOTAL.
26	1	3	30

The dated coin has the date 20[x]. It is not certain whether any unit figure followed at all. [Pl. LXVII coin No. 6.]

Coins on which his title K. or MK. is not clear.

Undated.	Dated.	Illegibly dated.	TOTAL.
28	3	..	31

[1] Unit figure is not erect, and is made to lean on the right probably for want of space. There can, however, be no doubt that it is 7.

[2] Unit figure 8 or 9.

[3] Unit figure most probably 9.

[4] The date is presumably 202.

The dated coins all bear the date 200.

The reverse legends on some coins have Viśvasīhasa and on some Viśvasīh asa.

I found one coin in the Barton Museum, Bhāvnagar (now in the collection of the Prince of Wales Museum, Bombay) with the date 200 for him as MK. This is important, as no coin of his as MK. has so far been discovered with the date entire and clear on it.

(12) Bhartṛidāman, son of MK. Rudrasena II.

Coins as K.

Undated.	Dated.	Illegibly dated.	Total.
95	49	..	144

Dated coins.

No.	Date.	No.	Date.	No.	Date.	No.	Date.
5	200[1]	1	201	3	20[x][4]	1	[20]4
2	20[0][2]	5[3]	202	9	204	23[5]	20[x][6]

The earliest known date for Bhartṛidāman as K. was 201, but the Sarvāṇiā hoard shows that he was ruling as K. at least one year earlier.

Coins as MK.

Undated.	Dated.	Illegibly dated.	Total.
159	160	43	362

[1] Though the upper part of 200 is not preserved, it is certain that no decimal or unit figure followed it.

[2] Possibly also 201 or 202.

[3] On one of these the name of the king is not clear.

[4] Unit figure 2 or 3.

[5] In the case of one of these coins it is not clear whether Bhartṛidāman was K. or MK., though the probability is that he was the former. On another the reverse inscription has *Rajña Kshatrapasa* instead of *Rājñaḥ Kshatrapasa.*

[6] The unit figure on one of these is probably 3, on four 4, and on one 5. In the case of six it is between 4-7; and for the rest no sober guess can be made.

Dated Coins.

No.	Date.	No.	Date.	No.	Date.	No.	Date.
1	204	4	209[6]	3	21[x][10]	4	21[x][13]
1	205[1]	1	20[x][7]	3	213	34	21[x][14]
1	206[2]	6	210[8]	1	21[x][11]	4	[2][x]4[15]
3	207[3]	7	211	12	214[12]	1	[2x]5[16]
2	20[x][4]	3	21[x][9]	3	215	49	2[xx][17]
6	20[x][5]	8	212	3	217		

Coins on which the title of the king (K. or MK.) is not clear.

Undated.	Dated.	TOTAL.
123	3	126

The three dated coins have the date 20[x].*

It will be seen from the above tables that no less than 632 coins have been assigned to Bhartṛidāman, the largest number that has been found for any Kshatrapa ruler in this collection. The earliest and latest known dates for Bhartṛidāman were 211

[1] The unit figure in the date, in Mr. Dikshit's opinion, is 5; possibly, it is 8. The name of the king is almost gone, except traces of the subscript *na* in *mnaḥ*.

[2] The title MK. is not well preserved.

[3] On one of these coins, the name of the king is not clearly preserved. [Pl. LXVII coin No. 8.]

[4] The unit figure on one coin is between 5-7, and the name of the king is not clear; on the other the unit figure is between 4 and 9, and the title MK. of the king is not clear.

[5] Unit figure is 8 or 9; one of these has almost certainly 8.

[6] On one of these, the name of the king can be traced with difficulty.

[7] The unit figure is either 7 or 9.

[8] On one of these coins the king's name is almost entirely gone, and on another it is doubtful whether there was any unit figure. [Pl. LXVII coin No. 9.]

[9] Unit figure probably 1.

[10] Unit figure probably 2.

[11] Unit figure probably 2 or 3.

[12] On one the name of the king is absent.

[13] One of these has probably 4 as the unit figure, one 6, and two 6 or 7.

[14] On two of these, the name is lost, on four the title MK. and on one, both.

[15] On two of these the central figure is certainly '200'; and on one the title 'MK' is not clear.

[16] It is not certain whether there was any decimal figure or not.

[17] Six of these coins contain only the father's name, *viz.*, Rudrasena, but the form of the eye on the portrait, and the form of the legend on the reverse, prove beyond doubt that these coins were issued during the latter part of Bhartṛidāman's rule as MK.

and 217, respectively. And though the Sarvāṇiā hoard does not furnish any date posterior to the latter, it certainly pushes back his reign seven years earlier, his earliest certain date being now 204. [Pl. LXVII coin No. 7.] It is worthy of note that this year is also the last known date for him as K. He, therefore, appears to have ceased to reign as K. and to have commenced to rule as MK. in the year, 204.

(13) Viśvasena, son of MK. Bhartṛidāman.

Coins as K.

Undated.	Dated.	Illegibly dated.	Total.
138	177	80	395

Dated coins.

No.	Date.	No.	Date.	No.	Date.	No.	Date.
1	20[6][1]	4	21[x][3]	12[6]	222	1	226
5	215	43	21[x][4]	3	223	6	22[x][9]
3	216	8	220	22	22[x][7]	1	2[x]7[10]
7	217	17	22[0][5]	1	224	26	2[xx]
3	21[9][2]	4	221	10[8]	225		

The earliest date shown for this prince in the preceding table is 206, which is, however, doubtful. [Pl. LXVII coin No. 10.] The next date, *viz.*, 215, is a new date and the earliest certain date for him. [Pl. LXVII coin No. 11.]

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[1] The date consists of two numerical signs, the second of which is which makes closer approach to the usual symbol for '6' than for any other.

[2] Unit figure probably 9, possibly 8.

[3] One of these dates is probably 217 and one 218; the remaining two are either 218 or 219.

[4] Unit figure between 4 and 9.

[5] It is difficult to say whether there was any unit figure.

[6] One of these coins, the date of which is somewhat doubtful, has two crosses punched on the obverse in circular incuses.

[7] Of these, eight coins are probably dated 221, seven 222, and seven 223.

[8] One coin is fresh from the mint.

[9] Unit figure between 4 and 6.

[10] The decimal figure is somewhat irregular. It appears to be like '80' but may be '10'.

(14) Rudrasiṁha II, son of Svāmi Jīvadāman.

Coins as K.

Undated.	Dated.	Illegibly dated.	Total.
64*	90	8	162

Dated coins.

No.	Date.	No.	Date.	No.	Date.	No.	Date.
1	226	1	22[x]	2	232	1	236
4	227	4 [1]	230	3	23[x][6]	1	237
1	228	2	23[0][5]	8	234	1	238
1	229	3	231	3	23[4]	4	23[x][7]
3[1]	22[x][2]	4	23[1][5]	5	235	1	23[x]
3[3]	22[x][4]	1	2[31]	1	23[5]	32[8]	2[xx]

The year 226 is a new date for Rudrasiṁha II [Pl. LXVII coin No. 12]. The latest date on his predecessor Viśvasena's coins is also 226. It thus seems that during one and the same year, *viz.*, 226, Viśvasena ceased and Rudrasiṁha began to reign. The latest certain date for the latter was long known to be 231, but that furnished by our hoard is 238. His regnal period is thus pushed forward by at least seven years.

(15) Yaśodāman II, son of K. Rudrasiṁha II.

Coins as K.

Undated.	Dated.	Illegibly dated.	Total.
21	121	15	157

* Seven out of these coins have *Rudrasahasaḥ* in the reverse legend.

1 One of these has *Rudrasahasaḥ* in the reverse inscription.

2 Unit figure between 6 and 9.

3 One of these gives Rudrasaha as the name of the ruler.

4 Unit figure between 7 and 9.

5 Unit figure somewhat doubtful.

6 Unit figure between 1 and 3.

7 Unit figure between 4 and 9.

8 Seven out of these have *Rudrasahasaḥ* and one out of these seven reads *Kshatrapasa*.

Dated coins.

No.	Date.	No.	Date.	No.	Date.	No.	Date.
3	238	3	241	3	244[3]	33	24[x][6]
1	239	5	242	1	245	13	24[x][7]
2	23[x][1]	3	24[x][2]	1	24[7][4]	1	254
13	240	1	243	1	24[x][5]	37	2[xx]

The earliest date hitherto known for this prince was 239, supplied by the Uparkoṭ hoard. But our hoard has a specimen containing the date 238 [Pl. LXVII coin No. 13] which therefore now becomes the earliest for him and also the first of his reign, because, as we have seen above, the Sarvāṇiā hoard furnishes the same year as the latest certain date for his predecessor Rudrasiṁha II.

(16) Rudrasena III, son of MK. Rudradāman II.

Coins as MK.

Undated.	Dated.	Illegibly dated.	Total.
8[8]	25	11	44

Dated coins.

No.	Date.	No.	Date.	No.	Date.
4	270	4	273	6	27[x]
6[9]	272	2	27[x][10]	3	2[xx]

(17) MK. Īśvaradatta.

6 coins of the first year of his reign.

[1] Unit figure on one of these is 8 or 9.
[2] Unit figure 1 or 2.
[3] Unit figure on one of these is slightly doubtful.
[4] Portion of the top of the unit figure is gone, but the reading is almost certain.
[5] Unit figure 8 or 9.
[6] It is difficult to say in the case of these coins whether any unit figure followed the first two numerals.
[7] Unit figure in five of these is possibly 1 or 2, but is between 4 and 9 in the case of the remaining.
[8] On one of these the name Rudrasena is gone.
[9] One of these is in two pieces.
[1] Unit figure between 4 and 9. Pandit Gaurishankar read this date as 275.

Coins on which the name of the father of the king only is preserved.

(*A*) *Father's name :—MK. Rudrasiṁha I.*

Undated.	Dated.	TOTAL.
..	4	4

All the four coins belong to a MK. son of MK. Rudrasiṁha I. The form *Mahākshatrapasa* found in the legend, shows that the coins cannot belong to MK. Saṅghadāman, on whose coins it is *Mahakshatrapasya.* Hence it is clear that they belong either to Rudrasena I or Dāmasena.

(1) One coin has the date 1[xx], where the unit figure may be 4 or 5. It may possibly belong to Rudrasena, as part of the lower curve of the letter *ru* can be faintly traced after *Mahākshatrapasa.*

(2) One coin with the date 1[xx] has traces of the letter *da* after *Mahākshatrapasa,* and thus may perhaps belong to Dāmasena.

(3) & (4) Two coins have the date 1[xx].

(*B*) *Father's name :—MK. Dāmasena.*

Undated.	Dated.	Illegibly dated.	TOTAL.
1	3	2	6

(1) One coin with date [1]60 belongs to the reign either of Vīradāman, or Yaśodāman as K., for part of the compound letter '*mnaḥ*' is clear before 'Rājño.'

(2) One coin, without date, may belong to the same princes, as well as to Yaśodāman, as Mahākshatrapa, for the same reasons.

(6) The dates on two of these are illegible and on two are 1[xx]. As the form of the legend: *Dāmasenaputrāsa* shows, these must belong either to the reign of Vijayasena, or Dāmajadaśrī III, as MK.

(*C*) *Father's name, Mahākshatrapa Rudrasena II.*

The legend more or less preserved in the case of these coins, is *Mahākshatrapasa Rudrasenaputrasa.* The bust of the king, the form of the eye and of the letters in the legend, all go to prove that the Rudrasena here referred to is MK. Rudrasena II, son of K. Vīradāman.

Coins on which the son of Rudrasena II is a Kshatrapa.

Undated.	Dated.	Illegibly dated.	TOTAL.
8	..	3	11

One of the 8 undated coins, has got a noteworthy punch-mark on the obverse, *viz.,* ꟷ the letter '*sa*' in square incuse.

Coins on which the son of Rudrasena II is a Mahākshatrapa.

Undated.	Dated.	TOTAL.
32	2	34

The two dated coins have the date 2[xx].

Coins on which the title of the son of MK. Rudrasena is uncertain.

Undated.	Dated.	TOTAL.
52	6	58

Of the 52 undated coins, 8 can easily be identified as coins issued during the latter part of king Bhartṛidāman's rule as MK., as the representation of the eye on these coins is similar to that shown on p. clxx, Form 5, of Rapson's *Catalogue* and which was prevalent after the date 211, or rather during the later years of MK. Bhartṛidāman.

One of the undated coins in this lot has got an interesting punchmark on the obverse. It consists of a cross within circular incuse.

Dated coins.

No.	Date.	No.	Date.	No.	Date.
3	20[x]	2	[xx]4	1	204

Coins on which only one name is preserved.

These are coins on which it is not clear whether the name preserved is that of the father or son.

(A) *Rudrasena.*—There are 4 coins without date, on which merely *Rajño Mahākshatrapasa Rudra* is preserved. There is no doubt that the king meant is MK. Rudrasena II. One of these four coins seems to preserve the letters *[ha]sa* before *Rajño* ; and so the coin may perhaps be assigned to Viśvasiṁha, son of MK. Rudrasena II.

(B) *Bhartṛidāman.*—Two coins, one of them undated, and the other with date 2[xx], preserve only the letters *bha* or *bhartu* after *rajño Mahākshatrapasa.*

There are 13 coins, which bear such very incomplete legends, that not a single name can be traced on them. All of them, however, appear to be struck during the period extending from the reign of MK. Rudrasena II to the reign of K. Viśvasena.

Coins which are struck only on the obverse, and which contain only a counter-impression of the bust, on the reverse.

Undated.	Dated.	Illegibly dated.	TOTAL.
27	17	12	56

Table of details for dated coins :—

No.	Date.	No.	Date.	No.	Date.	No.	Date.
1	[1]11	1	168	1	180	1	24[2]
1	14[0]	1	1[6]8	1	18[9]	1	249
1	14[x]	1	177	1	23[x]	1	270

DATES ON COINS OF THE WESTERN KSHATRAPAS FROM THE SARVĀṆIĀ HOARD.

Name of Prince.	Dates.
MK. Rudrasiṁha I	10[1], 10[5], 114.
K. Rudrasena I	121.
MK. Rudrasena I	135, 139, 142.
MK. Saṅghadāman	14[4].
MK. Dāmasena	*150*, 152, 1[5]4, 155, 157.
K. Dāmajadaśrī II	155.
K. Vīradāman	*158*, *159*, 160.
K. Yaśodāman	160.
MK. Yaśodāman	*160*.
K. Vijayasena	160, 16[1].
MK. Vijayasena	*161*, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172.
MK. Dāmajadaśrī III	17[2], *173*, 174, 175, 176, *177*,
MK. Rudrasena II	*178*, *179*, 180, 18 [1], *182*, 184, *185*, 186, 187, 188, 189, 190, 191, 194, 8].
K. Viśvasiṁha	*197*, *198*, 199, 200.
MK. Viśvasiṁha	*200*.
K. Bhartṛidāman	*200*, 201, 202, 204.
MK. Bhartṛidāman	*204*, *205*, *206*, *207*, *209*, *210*, 211, 212, 213, 214, *215*, 217.
K. Viśvasena	20 [6], *215*, 216, 217, 21 [9]. *220*. 221, 222, 223, 224, 225, 226.
K. Rudrasiṁha II	*226*, 227, *228*, 229, 230, 231, *232*, *234*, *235*, *236*, *237*, *238*.
K. Yaśodāman II	*238*, 239, 240, *241*, 242, 243, 244, *245*, 24[7], 251.
MK. Rudrasena III	270, 272, 273.

NOTE.—The dates, which are printed in italics, are new ones, known for the first time from this hoard.

D. R. BHANDARKAR.

A PREHISTORIC COPPER CELT FROM PALAMAU.

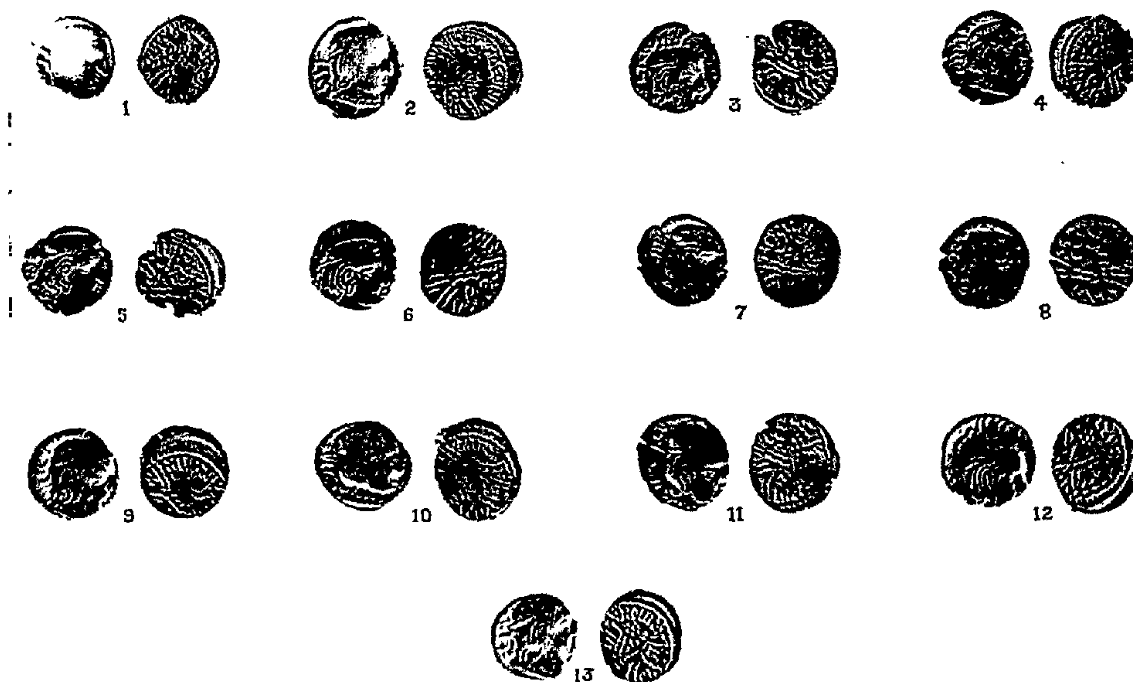
THE copper celt described in this note was sent to me for examination by the Hon'ble Mr. E. A. Gait. It was found in the Deputy Commissioner's bungalow at Daltongunge by Mr. Luby, the officer holding that position at the present time, who informs me that it was left there by one of his predecessors. From the label attached to the specimen it appears to have been found by Mangar Dusadh Chaukidar, in village Saguna, police station Paton, while he (Mangar) was working in his field on 27th September, 1910.

The celt, which is a broad one with slightly convex faces and unsymmetrically developed sides, is a fine example of early Indian Copper Age workmanship. The apex is wide and from it the sides gradually expand to meet the rather splayed out edge. It weighs 2,300 gms. Its greatest thickness is 2·3 cms., length 18·5 cms., width across the apex 10·3 cms., width across the widest portion, *i.e.*, across the top of the crescentic edge 15·4 cms. approximately, thickness at sides ·8 cms. Its general appearance is shown in Plate LXVII *b*. The celt is patched near the edge with a deep green patina, but the bright surface of the copper is exposed in the centre of each face. This patina is encrusted at a few small points with a thick calcareous deposit. It seems to have been roughly cast and then beaten out into its present shape; for the hammer marks are plainly visible. The cutting edge has been injured by hammering and filing, probably since it was found. The form is a very primitive one and closely imitates a well known stone model. It is related to certain flat examples from the Gungeria hoard, though it does not possess their uniform flatness or fine finish. I am inclined to regard it rather as a link between the Gungeria types and the rougher example recorded from Hazaribagh.

Including both the present specimen and another lugged celt which I recently had the privilege of examining from the Kurram, implements composed of practically pure copper have now been discovered at 18 sites in Northern India and the recorded finds must comprise at least 500 specimens.

I am indebted to the Hon'ble Mr. E. A. Gait for bringing this interesting discovery to my notice and for permission to record it in this note, and to the present Deputy Commissioner of the Palamau district for his help in tracing the locality. The latter officer has informed me that it is not known whether similar celts have been found anywhere else in the district.

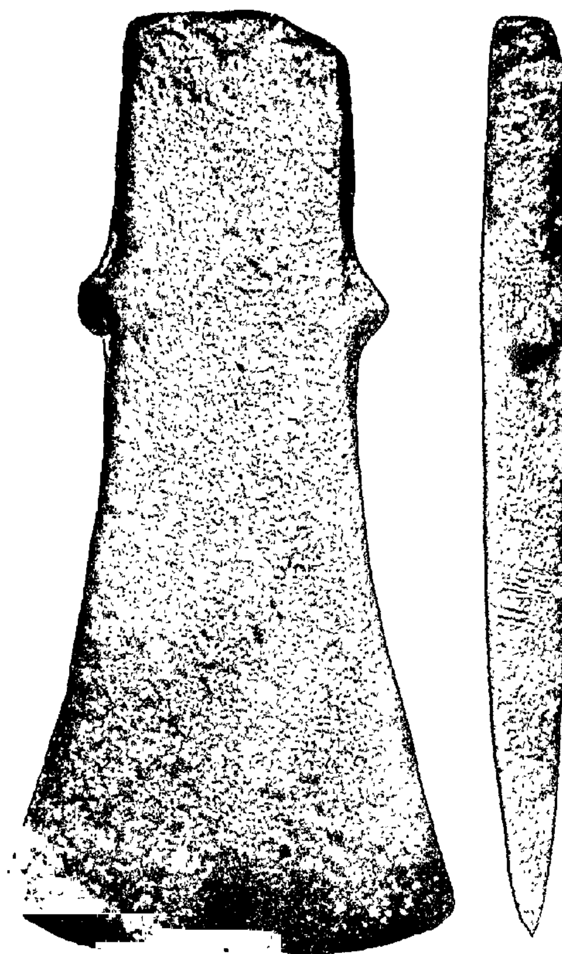
J. COGGIN BROWN.



a. Coins from Sarvania.



b. Copper celt from Palamau.



c. Copper axe from Kurram Agency.

Photo-Engraved & printed at the Offices of the Survey of India, Calcutta.

A PREHISTORIC COPPER AXE FROM THE KURRAM AGENCY.

I AM indebted to Sir John Marshall for the opportunity of examining and recording this copper axe from Shalozan village in the Kurram Agency, presented by Captain R. A. Lyall, the Political Agent, to the Peshawar Museum. It is a beautiful example of an early Copper Age type. The apex is narrow and truncated and the sides parallel as far as two projecting lugs, below which they gradually expand to meet a crescentic, splayed out edge, symmetrically moulded with respect to both back and front faces. It is coated with a corroded, dull green patina, fragments of which have recently been removed from the cutting edge, lugs and apex. The form is a primitive though not uncommon one. It is related to certain flat types from Gungeria in the Central Provinces and to others from Spain and Ireland, though these do not possess the solid lugs, which were obviously of service in binding the celt to a handle. It appears to be composed of pure copper, as far as can be ascertained without an analysis. Its general shape is seen in the annexed photographs in Pl. LXVII, *c*. It weighs 524 gms., and measures 13·4 cms. long, 6·7 cms. broad, across the top of the splayed out blade, 4·5 cms. across the lugs and 1·4 cms. thick.

J. COGGIN BROWN.

NOTES ON INDIAN NUMISMATICS.

1. Gold coins of Śivasimha of Mithilā.

In February 1913, the District Officer of Champaran, forwarded three small gold coins to the Indian Museum, on behalf of the Government of Bihar and Orissa. They formed part of a find of coins, from a village called Pipra, in the Champaran District. As it was stated in the letter of the District Officer that the coins could not be identified, a request was made for a loan of the other coins of the find for examination, but no reply was received.

The specimens presented to the coin cabinet of the Indian Museum belong to the same type and variety. They are round gold coins with diameters varying from ·3″ to ·325″ and weigh ·8968, ·9085 and ·9191 grammes respectively, *i.e.*, their weights vary from 13·6 to 14 grains; both sides of these coins are inscribed:—

Obv: *Śrī-*

Rev: 1. *Śiva-*

2.-*sya*. Pl. LXVII.—13.

A coin similar to these in all respects was figured by Cunningham in his coins of Mediæval India,[1] but it was not identified and the legend also was wrongly deciphered. He reads the legend *Śrī Śivaye* and does not mention the find spot of the coin. I am indebted to Pandit Hīrānanda Śāstrī, M.A., M.O.L., of the Lucknow Museum for this reference.

These coins resemble the quarter-*drammas* of the Central India dynasties of the later Mediæval period, *i.e.*, those of the Chedīs of Ratnapura,[2] the Kalachuris of Tripurī, the Chandellas of Jejābhukti.[3] They have not been described by anybody. The findspot was known in ancient times as Champakāraṇya and a class of coins bearing this place-name were described by Mr. V. A. Smith in 1897.[4] These coins are common not only in Champaran and Gorakhpur but also in the Punjab and United Provinces.[5] At the same time it is certain that the coins belong to a period posterior to the Muhammadan conquest of Northern India. The form of *Śa* found on them is very rarely used before the 12th century of the Christain era.

[1] *Coins of Mediæval India, pl. 54, p. VI. 18.*

[2] *V. A. Smith, Ind. Mus. Cat., Vol. I., p. 255.*

[3] *Ibid, p. 253, Madanavarman, No. 3.*

[4] *J. A. S., B., Vol. LXVI (1897), pl. I, p. 309; Ind. Mus. Cat. of Coins, Vol. I, p. 293.*

[5] *C. J. Rodgers, Cat. of coins, Lahore Museum, pl. IV p. 12.*

When it is certain that the coins belonged to the period, which followed the Muhammadan conquest of Northern India, and that Mithilā or Champaran had a local coinage of its own, the attribution of these three coins becomes easy. In my opinion they are the issues of King Śivasiṁha of Mithilā, the patron of the Vaishṇava poet Vidyāpati. Śivasiṁha is already known to scholars from the grant supposed to have been issued by him which is dated Samvat 1455 = Śaka 1321 = Sana 807 = 283 of the era of Lakshmaṇasena.[1] Dr. Eggeling has discussed the life and times of Vidyāpati while noticing a manuscript of *Durgābhaktitaraṅginī*,[2] and a complete genealogy of the dynasty has been given by Dr. G. A. (now Sir George) Grierson in his article on "Vidyāpati and his contemporaries."[3] The date of Śivasiṁha's accession has also been found in the works of Vidyāpati. In one of his poems it is stated that Śivasiṁha ascended the throne in 1400 A.D.[4] The court records of Mithilā, on the other hand state, that Śivasiṁha ascended the throne in 1446 A.D., but this statement is not at all trustworthy.[5]

II. Coins of Hill Tippera.

Very little is known about the coinage of the ancient Hill State of Tippera. Tippera existed as an independent kingdom from about the time of the Muhammadan conquest of Bengal or perhaps earlier. Stray notices of the coinage of this kingdom have appeared from time to time ; but no cabinet in India or elsewhere seems to possess a representative collection of the coinage of this State. The earliest notice of Tippera coins is perhaps to be found in Marsden's work.[6] He describes five coins of Hill Tippera :— (1) Bahu-Māṇikyadēva with Queen Satyavatī (Ś. 1607 = 1685 A. D.), (2) Dharmmamāṇikyadēva (Ś. 1636 = 1714 A.D.), (3) Kṛishṇamāṇikyadēva (Ś. 1760 A.D.), (4) Kṛishṇamāṇikya with Queen Jāhnavī of the same date, and (5) Rājadharamāṇikyadēva (Ś. 1707 = 1785 A.D.). Mr. E. A. Gait in his report on the progress of Historical Research in Assam, has mentioned coins of two kings : Govindamāṇikya (Ś. 1602 = 1680 A. D.) and Dharmmamāṇikya (Ś. 1636 = 1714 A.D.)[7] The latter coin seems to have been presented to the Asiatic Society of Bengal[8] but appears to have been lost, as it could not be found in 1905, when V. A. Smith published the first volume of the Catalogue of coins in the Indian Museum in 1906,[9] which had then received the coins of the Asiatic Society of Bengal. Till 1913 the cabinet of the Indian Museum contained only one coin of Hill Tippera.[10] In that year the Durbar of Tippera presented a set of ten silver coins to the Indian Museum at the request of the Government of Bengal. These coins are being described in the following pages.

Tippera, like so many other Native States, possesses the right of issuing coins from its own mint, but this right is at present availed of very rarely. Usually new coins are

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[1] *Ind. Ant., Vol. XIV, pp. 190-191. Proc. A. S. B. 1895, p. 143.*
[2] *Cat. Skt. Mss. in the Library of the India Office, pt. IV, pp. 874-876, Art. No. 2564.*
[3] *Ind. Ant., Vol. XIV, p. 196.*
[4] Dinesh Chandra Sen's *History of the Bengali Language and Literature, p. 138.*
[5] *Ibid.*
[6] Marsden's *Numismata Orientalia, p. 793, pl. LII.*
[7] *Report, etc., p. 4.*
[8] *Proc. As. Soc. Bengal, 1895, p. 86.*
[9] *Cat. Coins. Indian Museum, Vol. I, p. 297.*
[10] *Ibid . p. 308.*

issued on the installation of a new Chief. The coins described in the following pages may be divided into two different parts :—

I. The Coins of the Independent State of Tippera, and

II. The coins of the Feudatory State of Tippera.

Most of the Tippera coins are dated and the era used in dating them is the Śaka era. The coins issued by the last two chiefs of Tippera, are however dated in what is called *Tripur-ābda*, which on calculation proves to have begun in the year 590 A.D. The coinage of Tippera has so far been found only on two metals, *viz.*, gold and silver. Only one gold coin has been described; that of Rājadharamāṇikya, the rest of the coins are all in silver.[1] No copper coins of this state have been discovered.

The set of coins presented to the Indian Museum contains the oldest known coin of the Tippera State. This is a coin of Dhanyamāṇikya, dated Ś. 1412=1490 A.D. Dhanyamāṇikya ascended the throne in Ś. 1412, *i.e.*, 1490 A. D. on the assassination of his younger brother, Pratāpamāṇikya II.. His Commander-in-Chief, Rāya Chayachāga subdued the Kookie hill men and at this time the boundaries of the kingdom were co-terminous with those of Burma. During this reign Sultan 'Alā u'd-Dīn Ḥusain S͟hāh of Bengal and Meng Raja of Arakan are said to have attempted to conquer Tippera, but Dhanyamāṇikya and Chayachāga baffled them both.

The set presented by the Tippera Durbar contains four coins of Dhanyamāṇikya. In two of these he is associated with his consort, Queen Kamalādevī, the third and fourth bear his own name only. The same set contains three coins of Ratnamāṇikyadeva. There are at least two Ratnamāṇikyas in the list of the kings of Tippera. The first of these came to the throne in Ś. 1201=1279 A.D. and is said to have been the contemporary of Sultan Mug͟hiṣu-d-Dīn Tughril of Bengal. The second king of the name ascended the throne in 1682 A.D. As none of the coins are dated, they cannot be definitely assigned to any of these two. If they are the issues of Ratnamāṇikya I, then they are older than the coins of Dhanyamāṇikya, and are the oldest known coins of the Tippera State. One of the coins of Ratnamāṇikya bear a marginal legend on the reverse, which cannot be read completely on account of its imperfection. It mentions a city named Vāraṇapurī and contains three syllables *ddi, dvā, ddā* which are to be found on the reverse of all other coins of Ratnamāṇikya. One coin of Kṛishṇamāṇikya was figured and described by Marsden. I found another in the possession of a friend in Calcutta. This also was issued in Ś. 1682=1760 A.D. in association with the chief queen *Mahādevī*) Jāhṇāvī. Mr. V. A. Smith, in his catalogue of coins in the Indian Museum has published a coin of a Tippera chief whose name he reads *Rāmasiṁhamāṇikya*.[2] On examining the original I find that the name is *Rāmagaṅgāmāṇikya.*

The set contains three coins of the feudatory chiefs of Tippera. They are the issues of Īśānachandra-māṇikya, in association with his chief queen (*Mahādevī*) Muktāvalī, Vīrachandramāṇikya with his chief queen Rājeśvarī and Rādhākiśoramāṇikya with his chief queen Tulasīvatī. Īśānachandra retains the ancient family device on his coins, the lion with one fore-paw extended, and uses the Śaka era in dating. But in the coins of the last two chiefs, the Tippera coat of arms takes the place of the ancient lion and the dates are expressed in the *Tripur-ābda.*

[1] *Numismata Orientalia*, pp. 793-97, pl. LII, Nos. 1208-14.

[2] *Cat. of Coins in the Ind. Mus., Calcutta*, Vol. I, p. 308, pl. XXIX, No. 16.

Description of Coins.

Number, weight, measurement and metal.	Name of King.	Date.	Obverse.	Reverse.
1. Æ ·9 162.	Dhanyamāṇikya	Ś. 1412 . . =1490 A. D.	Square in circle with ornaments in the space outside the square. Four line legend in square :— 1. *Tripurendra-* 2. *Śrī-Śrī-Dhanya-* 3. *mānikya-Śrī-ka-* 4. *malādēvyau* " The king of Tripura the illustrious Dhanyamaṇikya (and queen) Kamalādevī."	Rayed circle. Inside circle grotesque lion to 1. Below *Śaka 1412.* Pl. LXVIII, 4.
2. Æ 1·1 159·5.	"	Ś. 1419 (?) =1497 A. D.	Ditto . .	Rayed circle but grotesque lion to r. Inside circle *Śaka.* 1419 (?). Pl. LXVIII. 5.
3. Æ 1·1 156·5.	"	No date .	Ornate square in rayed circle. Three-line legend :— 1. *Śrī-Śrī-Dha-* 2. *nya-māni* 3.*-kya-dēva.* " The illustrious Dhanyamāṇikyadēva."	As in No. 1, but no legend. Pl. LXVIII, 6.
4. Æ 1·1 161·5.	"	Ditto .	Double square with a row of dots. Legend as in No. 3.	Rayed circle but grotesque lion to r. Two fishes below lion. No legend. Pl. LXVIII. 7.
5. Æ 1·1 161·5.	Ratnamāṇikya	Ditto .	Double square inside circle. Four line legend:— 1. *Śrī-Nārāyaṇa-* 2. *charaṇa-para-* 3. *Śrī-Śrī-Ratnamā* 4. *nikya-dēva.* " Devoted to the feet of Nārāyaṇa the illustrious Ratnamāṇikya dēva."	Grotesque lion inside circle running to 1. Marginal legend *Śrī* (?) *dvaddā* (?) *Varaṇapurī jayaḥ......* " the conquest of Vāraṇa a city...." Pl. LXVIII, 8.
6. Æ 1·1 163·5.	Ditto .	Ditto .	Ornate square in rayed circle . . . Three line legend :— 1. *Śrī-Śrī-Ra-* 2.*-tnamāṇi* 3.*-kyadevaḥ* " The illustrious Ratnamāṇikyadēva."	Rayed circle. Grotesque lion to 1. Legend in ground *ddi, dva, ddā.* Pl. LXVIII, 9.

Number, weight, measurement and metal.	Name of King.	Date.	Obverse.	Reverse.
7. AR 1 163.	Ratnamāṇikya	No date . .	Ornate square. Four line legend :— 1. *Śrī-nārāyaṇa-* 2. *charaṇa-para* 3. *Śrī-Śrī-Ratnamā-* 4. *ṇikyadēva.*	Lion as usual. Legend in ground *ddī, dva, ddā.* Pl. LXVIII, 10.
8. AR 1	Krishamāṇikya	*Ś.* 1682=1760 A.D.	In square, in circle, five line legend :— 1. *Śiva-durgā-pa-* 2. *de Śrī-Śrī-yuta* 3. *Krishṇamāṇikya* -4. *dēva-Śrī Jāhṇa* 5.-*vī mahādevyāu.* " At the feet of Śiva and Durgā, devoted to Srī, Krishṇa-māṇikya (and) chief queen Jāhṇavī.	Grotesque lion to l. Legend in ground "*Śaka* 1682." Pl. LXVIII, 11.
9. AR 1·1 161·5.	Isānachandra-māṇikya.	*Ś.* 1771=1849 *A.D.*	Six line legend in side dotted circle :— 1. *Rādhā-Krishṇa-pa-* 2. *de Śrī-Śrī-yuta Ī-* 3. *Śānachandramāṇikya* 4. *dēva-Śrī-Śrīmatī* 5. *Muktāvalī ma-* 6. *hādevyau* "At the feet of Rādhā and Krishṇa devoted to Srī, Iśānachandra māṇikya (and) the chief queen Muktāvalī."	Concentric circle, the inner circle bearing a row of lotus petals with beads at intervals. Inside circle grotesque lion with trident on its back, to l. Legend in ground :— *Sakāvdā* 1771. Pl. LXVIII, 13.
10. AR 1·15 161.	Vīrachandramā-ṇikya.	Tripura year 1279=1869 A.D.	Inside rayed circle :— 1. *Rādhākrishṇapadē* 2. *Śrī-Śrīyuta Vīra-chandra-* 3. *māṇikya dēvavarmmā* 4. *Śrī-Śrimatī Rājeśvarī* 5. *Mahādevī.* The language of the legend is Bengali.	Concentric circles as in No. 9. Coat of arms of the Tippera State. Legend above 1279 *Tripur-āvda.* Pl. LXVIII, 14.
11. AR 1·1 137.	Rādhākiśora-māṇikya.	Tripura year 1306=1896	Inside rayed circle :— 1. *Rādhākrishṇapadē* 2. *Śrī-Śrīyuta Rādhā-kiśora-* 3. *devavarmmamāṇikya* 4. *Śrī-Śrīmatī Tulasīvatī* 5. *Mahādevyau.* The language is Sanskrit.	Concentric circles as in No. 9. Coat of arms of the Tippera State. Legend above *Tripurāvda* 1306. Pl. LXVIII, 15.

Since writing the above I have come across a gold coin of Krishṇamāṇikya struck in the year 1682 of the Śaka era, *i.e.*, 1760 A.D. A similar specimen was described in the Numismata Orientalia but in this case the specimen is silver.[1] Only one other gold coin of the Tippera Kingdom seems to have been discovered up to date. This is a coin of Rājadharamāṇikya.[2] The present coin is in the possession of Babu Prosad Das Goswami, Zemindar of Serampore, District Hooghly of Bengal, and is the first gold coin of Kṛishṇamāṇikya and second gold coin of the kingdom of Tippera which has come to notice.

Metal, weight and size.	Obverse.	Reverse.
Gold 164·8	Square inside circle (1) *Śiva-durgā-pa-* (2) *dē Śrī-Śrī-yuta* (3) *Kṛishṇamāṇikya* (4) *dēva-Śrī Jāhṇa* (5) *vī Mahādevyau* " At the feet of Śiva and Durgā, devoted to Śrī Kṛishnamāṇikyadēva (and the) chief queen Jāhṇavī."	Circle with a border of smaller circles with points in centres. In circle Lion to left Date below Śaka 1682. Pl. LXVIII, 12.

III. Coinage of the Gond Kings of Central India.

In January 1913, Rai Bahadur Hiralal, Extra Assistant Commissioner, Chhindwara, Central Provinces, gave three very small pieces of silver to me for examination. At that time he stated that these pieces of silver are generally found at a place called Tania, in the Chhindwara District, Central Provinces. A few months after this the Director of Agriculture, Central Provinces, forwarded a set of gold coins found in the Jubbulpore District as presentation to the Indian Museum. This set contained a square gold coin bearing a legend in Nāgari, which Mr. H. Nelson Wright had identified as a Native State Muhar. On the reverse of this coin is to be found a grotesque lion walking to the left, one fore-paw raised, which is exactly similar to the figure on the irregular silver pieces found by Rai Bahadur Hiralal at Tania. The Nāgarī legend on the gold coin is very modern but I could not read it as it contained many mistakes. The reverse also bore another legend, which seemed to be a senseless imitation of Persian or Arabic legends. So I sent the original coin to Rai Bahadur Hiralal, who pronounced the other legend to be Telugu and assigned the coin to Saṁgrāma Sāhī.

"Saṅgrāma Sāhī or Saṁgrāma Sāhī" says Mr. Hīralal, "as still pronounced by the old people of the locality where he reigned, was the most illustrious Gond King of the Gaṛhā-Mandlā dynasty. It was he who extended the Gond dominion from three

[1] *Pl. LII, No. mccxiii ; p. 796.*
[2] *Ibid.* No. mccxiv ; *p.* 797.

or four to fifty-two garhs. " He is said to have become a king in 1480 A. D. and is said to have reigned for fifty years. Gaṛhá is about two miles from Jubbulpore and Mandla sixty miles. Saṁgrāma Sāhī was the father-in-law of Rāṇī Durgāvatī, who fought with Akbar's general Asaf Khan. Rai Bahadur Hiralal's reading of the legend on the gold coin is given below :—

Obverse.

Crested lion to l. in small square inside double square. Nāgarī legend along the margin.

Actual Reading.	Corrected Version.
1. *Putarī Svasa*	*Putarī Svasti*
2. *ī Sagrama*	*Śrī Śaṁgrāma*
3. *Sahi sava*	*Sāhī samva-*
4. (*t*) *1570*	*-t 1570*

Reverse.

Dotted square divided into two rectangles by two parallel lines. Telugu legend in upper compartment and Nāgarī legend in lower.

Telugu Legend.

1. *Śrī Sagrāma*	*Śrī Saṁgrāma*
2. *Sāha*	*Sāhī*

Nagari Legend.

3. *ī gramasaha*	*Svasti Śrī*
4. *Sva Śrī sama*	*Saṁgrāma Sāha* Pl. LXVIII. 16.

Weight 166·5 grains.

Size : approximately square, ·7″.

The term *putarī* is still used by the people of Garha-Mandla, to denote a coin which does not reach the weight of a muhar. If Saṁgrāma Sāhī came to the throne in 1480 A.D. then this coin was struck in the 33rd year of his reign (Vikrama Samvat 1570 = 1513 A.D.)

The Nāgarī legends on this coin were very carelessly incised on the dies. Rai Bahadur Hiralal explains the curious grouping of words in them as follows :— " The

engraver seems to have been a very bad fellow. He has egregiously blundered especially on the reverse of the coin, where he has endeavoured to supply omissions in a very curious manner. The original intention appears to have been to inscribe the name of the king in Telugu and Hindi characters as *Srī Saṁgrāma Sāhī.* In Telugu this has been done allright, except that the letter *gra* has been turned upside down, and the initial *Srī* has not been well formed. While putting the name in Hindi, the engraver commenced with *ī*, his symbol for *Śrī*, and proceeded on with the name of which he happened to omit the very first letter, *viz.*, *saṁ*. It seems to have subsequently occurred to him that he should supply the omission by putting the letter up in the next line, but finding that there was a good deal of space which could admit the insertion of a number of letters, he seems to have formed the idea of adding *Svasti Srī* to the name as was done in the obverse. In the 4th line, therefore, he commenced with *sva*, but happened to omit *sti*, and put *Śrī* after it. After *Śrī* he had to insert *saṁ*, which he had omitted in the 3rd line, but finding that there was space available for 2 letters he split into *sama*. Thus one should read the 4th line first, and then the 3rd line, in which the symbol for *Śrī* should be expunged as superfluous." According to the *Āīn-i-Akbarī* the people of Garha-Mandla paid revenue in elephants and gold muhars.

The Telugu legend on the gold coin is explained by Mr. Hiralal in this manner: "The legend on the *putarī* in Telegu characters seems to tell its own tale. According to the local tradition the Gond kings of Garha-Mandla, came from the banks of the Godavari and this seems to be confirmed by the fact that Saṁgrāma Sāhī did not forget his nativity and got his name inscribed in the language of his original country, in spite of the fact that the tract he ruled in was wholly Hindustanī."

Three silver coins bearing the same device as the gold coin found in the Jubbulpore District were found by Rai Bahadur Hiralal at Tania, in the heart of the Satpura plateau. Two of them are roughly circular in shape while the third is round. The square coins are 13 grains in weight, and one side measures ·3″. The round coin weighs 14 grains and its diameter is ·325″. They bear the figure of the lion statant on one side. Their reverses are blank. In one of the square coins, a little bit has been dug out of the reverse, perhaps to equalize the weight. (Pl. LXVIII, 17-19.) The appearance of the silver coins is much older than that of the gold coin.

IV. Coins of Śrīdāma.

Four silver coins discovered in the Pichhore Pargana of the Gwalior State were sent by the Resident of Gwalior for examination. After cleaning they were found to be a new variety of Indo-Sassanian Coinage.

All of these coins are roughly circular. Their weight varies from 60·5 to 62·5 grains (4·047 to 3·917 grammes). On the obverse of some coins we find traces of a human head and the legend *Srīdāma* more or less complete. On the reverse we find a conventional representation of the Sassanian fire-altar. The form of *śa*, used in the legend, indicates that the coins cannot have been issued before the 10th century A. D. The name *Srīdāma* has not been met with as yet in any Indian Inscription and the coins, so far as I know, have not been described before.

Description of Coins.

Number, weight, measurement and metal.	Name of King.	Date.	Obverse.	Reverse.
. Æ ·65″×·7″ 60·5.	Śrīdāma	..	Traces of a human head (?) Legend :— 1. *Śrī* 2. *dāma.*	Conventional representation of a Sassanian Fire-altar. Pl. LXVIII, 20.
2. Æ ·85″×·8″ 62·5.	Do.	..	Do. but legend :— 1. *Śi* 2. *dāma.*	Do. Pl. LXVIII, 21.
3 Æ ·8″. 62.	Do.	..	Do. but legend :— 2. *dāma.*	Do. Pl. LXVIII, 22.
4. Æ ·7″×75″ 61·25.	Do.	..	As above but legend :— 1. *Śr(ī)* 2. *dāma.*	Do. Pl. LXVIII, 23.

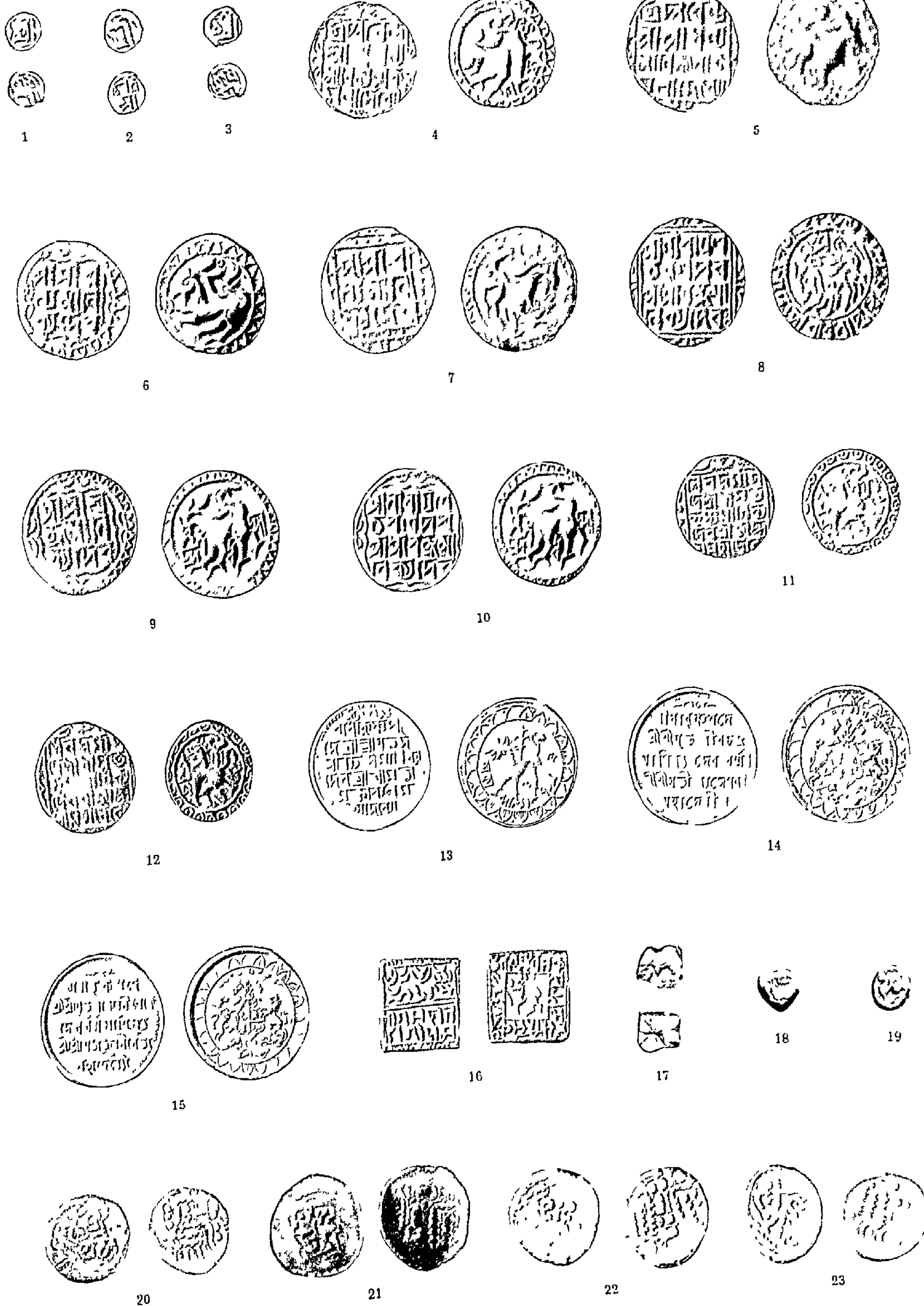
V. Silver coins of Maḥmūd Shāh II Khiljī of Malwa.

Four silver and forty-eight copper coins were found in the Dewas State Junior Branch and were sent to me for examination by Major H. A. K. Gough, I.A., First Assistant to the Agent to the Governor-General in Central India in November 1914. The silver coins were issues of Maḥmūd II Khiljī, and are of exceptional interest. The copper coins are issues of Āḥmad I and Maḥmūd I of Gujarat, Ḥoshang Ghōrī, Ghiyās Shāh, Nāṣir Shāh and Maḥmūd II, of Malwa and Ḥusain Shāh of Jaunpur. There are four silver coins of Maḥmūd II, one of which at least is unique. It is a square coin like the majority of Malwan coins and its execution is much superior to that of the ordinary Malwan silver coins. The coin is not exactly square as its sides are bulging out. The legend on both sides is incised inside a circle within the square area, the circumference of which touches the sides. Its weight is 168·6 grains which approximates to the average weight of the gold coinage of the Malwa Sultans. The corners on each side are occupied by certain fragments of letters or symbols which are not clearly legible. They may be the names of the four companions of the prophet or ornamental lines. The coin is dated. It was issued in the Hijri year 923=1517 A.D. In that year Muzāffar II, King of Gujarat, consented to assist Mahmūd and set out at the head of an army to suppress Medini Ray, a Rajput Chief, who was his minister but had become paramount in the kingdom by suppressing the Muḥammadan nobles.[1] The second coin is a duplicate of the silver coins of Maḥmūd II, in the cabinet of the Indian Museum, Calcutta.[2] It was issued in the year 919 and weighs 82·7 grains. The specimens in the Indian Museum weigh 78 and 83 grains respectively. This is the approximate weight of the Malwan half-rupee. The large coin described above

[1] *Numismatic Chronicle, 4th series, Vol. III, 1903, p. 385.*

[2] *Cat. of Coins in the Indian Museum,* by H. N. Wright, *Vol. II, part III, p. 255, Nos. 87, 88, 88a.*

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's a full rupee. The two remaining coins are quarter and one-eighth rupees, and were issued in the Hijri years 919 and 918, respectively. They weigh 42 and 21 grains. There is only one coin in the cabinet of the Indian Museum which can be called a half-tankā or half-rupee. It is a coin of Nāṣir Shāh and weighs 37 grains.[1] Another silver half-tankā or half-rupee in the British Museum Collection has been catalogued by Stanley Lane-Poole. It weighs 43 grains.[2] Besides these no other half-tankās seem to have been noticed. The other coin weighs 21 grains and is a $\frac{1}{8}$th rupee piece. The piece is exceptional as recorded weights of one-eighth rupee pieces vary from 20 to 18 grains according to Mr. H. N. Wright. There is not a single specimen of $\frac{1}{8}$th rupee pieces of Maḥmūd II or any other king of Malwa in the Indian Museum. Lane-Poole's British Museum Catalogue does not contain any specimens of this. The legend on the reverse of the two smaller coins does not agree with that on the larger ones. It has not been fully read as yet. Mr. H. N. Wright read only a part of this *Akbar āllāhō* on certain coins of Ghiyāṣ Shāh and Nāṣir Shāh.

No.	Weight and size.	Obverse.	Reverse.
1	168·6 ·8	الواثق بالملک الصمد ابو المظفر محمود شاه	بن ناصر شاه الخلجي السلطان خلد ملكه date 923. Pl. LXIX, 24.
2	82·7 ·65	Ditto.	Ditto but date 919. Pl. LXIX, 25.
3	42 ·5	محمود شاه خلجي بن ناصرشاه خلجي	date 919. لكبر الله Pl, LXIX, 26.
4	21 ·4	محمود شاه خلجي بن ناصر شاه	Ditto date 018 for 918. Pl. LXIX, 27.

VI. A new type of the silver coinage of Jalāl-ud-Dīn Muḥammad Shāh of Bengal.

This coin was discovered close to Bangaon, a sub-division of the Jessore District of Bengal by a Muhammadan peasant several years ago. It has been purchased by Babu Nanigopal Mazumdar, an inhabitant of the same district, who is a student of Indian Archæology as well as a keen collector. Babu Nanigopal Mazumdar brought this coin to me several months ago along with several other coins of the Sultans of Bengal, also found at the same time and at the same spot. The other coins were for the most part coins of 'Ala-ud-Dīn Ḥusain Shāh of Bengal or his descendants. This coin attracted my attention as it was a Bengal coin but at the same time different from all common Bengal coins as the word *al-ḥāmī* occurs in the middle of the legend. The name of

[1] *Ibid.* p. 253, No. 72.
[2] *British Museum Catalogue of Indian Coins. Muhammadan States*, p. 119, No. 365.

the king Muḥammad S͟hāh is clear on the reverse. Neither the mint name nor the date is to be found on the coin. Inspite of this I am inclined to assign this king to the renegade Hindu, Jalāl-ud-Dīn Muḥammad S͟hāh of Bengal. My reasons are very simple. The coin itself was found along with a number of coins of the Bengal Sultans. It is covered with a number of punch-marks or shroff-marks, a peculiarity of the coinage of the Bengal Sultans. It is quite different in type from the silver coinage of any of the five Muḥammads who were Sultans of Delhi. None of these five issued a varied silver coinage. The only Muḥammad of Northern India who issued a varied silver coinage is Jalāl-ud-Dīn Muḥammad S͟hāh. It is not possible to assign this coin to Shams-ud-Dīn Muḥammad S͟hāh G͟hāzi, as none of the Suri or Afghan coins is ever known to have shown any archaic form of writing such as *Tughra* or *Ḳūfi*. On the other hand two different types of the coinage of Jalāl-ud-Dīn Muḥammad S͟hāh are in *Tughra*. The coin weighs 166·4 grains and measures 1·15 inches.

Obverse.	Reverse.
الناصر الدين (؟) ر	الواثق بتائيد
الد نيا (؟) ا'حامي	الرحمن ابو المظفر
لاهل الايمان	محمد شاه السلطان
	Pl. LXIX, 28.

VII. Coinage of later Guptas.

Mr. John Allan's excellent work on the coinage of the Gupta dynasties has brought to light a new class of Gupta coins, that of the later Guptas. Previously finds of these coins were recorded from time to time. The late Raja Rajendra Lala Mitra published a similar coin found near the Arunkali river, close to Muhammadpur, in the Jessore District of Bengal.[1] Mr. H. E. Stapleton has recorded finds of the same type of coins in the Districts of Dacca and Faridpur.[2] A similar coin was found in the Bogra District years ago by the late Babu Gangadhar Ray Chaudhury, Zemindar of Sadyapushkarini in the District of Rungpur. It is still in the possession of his son Rai Mrityunjoy Ray Chaudhury Bahadur, who has kindly lent it to me for publication, Pl. LXIX, 30. The Jessore specimen was most probably acquired for the Asiatic Society of Bengal and remained there till 1904 when the entire collection of the Society was transferred to this Museum. The late Dr. Theodor Bloch took it for a modern forgery and consequently it was not sent to Mr. V. A. Smith to be catalogued. It was afterwards found in a tray containing coins which were of no use for Numismatic purposes. It weighs 83·3 grains. On the obverse the king stands to left with a bow in his right hand and a standard on his left side. There is a horse below his right armpit and the letter *Śrī* to the left of his face. The arrow and the horse's head on the standard are not clear on this specimen. On the reverse we find a goddess standing to the right and a meaningless copy of a Gupta inscription by her side. Only one letter is legible among this lot. This is *ja*, the lowermost syllable, Pl. LXIX, 30. The diameter of the coin is ·9 inch. The other coin which is figured in the plate is a much better specimen. It weighs 85 grains and its diameter is ·9 inch. Its execution and material are far superior to those of the Jessore specimen. The figure of the king

[1] *J. A. S. B., 1852, p. 401, pl. XII, 10.*
[2] *J. & P. A. S. B. (New Series), Vol. II, p. 141.*

is fine and graceful, and but for the reverse the coin might have been mistaken for a specimen of the issues of one of the early Gupta kings. The letter *pa* is to be found to the left of the face of the king. The reverse is similar to that of the Jessore specimen but the legend is altogether illegible.

VIII. Revised readings of certain Coins in the Indian Museum Cabinet.

A careful examination of a number of coins catalogued by Mr. V. A. Smith has led to the decipherment of some of the legends which Mr. Smith could not make out. The first coin is one included by Mr. Smith among Sundry coins (No. 1, p. 333) and is an issue of a prince of North-Eastern India whose name was Vijayanārāyaṇa. This specimen is of surpassing interest as it is an issue of one of the pre-Mughal Muḥammadan sovereigns most probably a Sultan of Bengal, which was re-struck by Vijayanārāyaṇa. The process of re-striking has not obliterated the Arabic legend altogether and traces of it are still legible on both sides.

Obverse.	Reverse.
الا الا له	الا لو الا

The legend at the time of restriking was Bengali :—

Obverse.	Reverse.
(1) Srī Srī Rā (?)	(1) yaṇa Hā
(2) ja (?) Vijayanā	(2) a (?) Ksha (?) sā (mā) lā
(3) rāyaṇa chandī	(3) Kumadana (tha ?)
(4) charaṇa parā-	Pl. LXIX 32.

The third coin of this series (Sundry coins p. 333, No. 3) is a very peculiar specimen. It is a silver coin having a square inside a circle on each face in which the legend on one side is Bengali but on the other side Nagari. I have not seen a second coin like this. This also was most probably issued from one of the North-Eastern mints, as like the coins of the Independent Sultans of Bengal it is covered with a number of punch-marks or shroff-marks which have disfigured the legend completely.

Obverse. (Bengali.)	Reverse. (Nagari.)
1. *tī*	1. *ma*
2. *a-*	2. *hara* (*ja* ?)
3. *rājarāj* (*je* ? *ndra*)	3. *Saudevya nā* (*ma* ?)
4. *ramaja*	4. *-alātma-*
5. *sa* (?)	5. *ja* Pl. LXIX 31.

In upper margins Sa and Ka and in lower right margin 141 (4) = 1492 A.D.

I have not been able to assign either of these two coins. There is no Vijayanārāyaṇa either in the Ahom dynasty of Assam or the Koch dynasty of Hajo or Kochbihar.

There is one in the list of kings of the Jaintia hills,[1] who reigned in the last decade of the eighteenth century, but he came too late to have re-struck a silver coin either of the Sultans of Delhi or the Sultans of Bengal.

Two gold coins in the Indian Museun cabinet have not been properly assigned as yet. These resemble Imperial Gupta coins in many points, but the name of the sovereign who issued them has not been ascertained as yet. One of these coins was found close to the Arunkhali river, near Muhammadpur in the Jessore District,[2] the provenance of the other coin is unknown.[3] Both coins are of base gold, the metal of the Jessore coin being slightly purer than that of the other one. The name of the king on both of the coins is the same. In the Jessore coin, we find the name over the right hand of the king, *Yama,* one syllable over the other, Pl. LXIX. 33. In the other coin the same name is to be found under the right armpit of the king, but here, perhaps, owing to the die sinker's mistake, the letters are reversed. Consequently we have *maya* instead of *Yama,* Pl. LXIX. 34. The top of *Ya* in the Jessore coin is not complete, in the other coin we have something like a superscript *ra.* Is the word then *marya*? Mr. V. A. Smith reads the reverse legend on the Jessore coin as *Narendrāditya.* Mr. John Allan has accepted this reading in his catalogue.[4] But I find on careful comparison that the obverse legend on both coins is the same, *i.e., Narendravinata.* The legend on the obverse of the Jessore coin is very clear and there are three distinct syllables after *ndra.* The legend on the other coin is blurred because the coin was struck twice with the same die. After prolonged examination under a microscope I found that these letters cannot be anything but *vinata.*

IX. Coins of Danujamarddana.

A large number of coins of this prince as well as of Mahendradeva, whose coins I described for the first time in a previous volume,[5] have been collected by Mr. H. E. Stapleton, M.A., B.Sc., Inspector of Schools, Dacca, Bengal. The fresh discoveries prove that I was wrong in reading the Maldah coin as 1336 Śaka. In this coin the thousands hundreds and tens were clear but only a portion of the unit was visible. This portion was a hook which is to be found only in the case of "6" and "9." As the two coins of Danujamarddana which I described bore the date 1339, I guessed that this coin may have been issued in the other possible year, *i.e.,* 1336. This also must have been 1339 as all other coins of Mahendradeva were issued in the fifth decade of the fourteenth century of the Śaka era and as the Maldah coin bears the figures 133x, therefore this also must have been issued in Śaka 1339=1417 A.D., at the latest, because all known coins of Danujamarddana bear the date 1339. Mahendradeva must therefore be the successor and not the predecessor of Danujamarddana. Mr. Stapleton kindly allowed me to examine these coins and I am certain that nearly all of his coins of Mahendradeva bear the date 134x. His specimens of the coinage of Danujamarddana show that my conjectural reading of the mint-name as *Chandradvīpa*

[1] *Cat. of the Prov. Cabinet of coins, Eastern Bengal and Assam, Shillong, 1911. p. 211.*
[2] *V. A. Smith, Cat. of Coins in the Indian Museum, Vol. I, p. 122, uncertain, No. 1.*
[3] *Ibid, p. 120, uncertain, No. 1.*
[4] *British Museum Cat. of Indian Coins, Gupta Dynasties, pp. 149-150.*
[5] *Ante, 1911-12, pp. 167-70.*

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cannot be maintained. Mr. Stapleton has not as yet arrived at any satisfactory solution of this problem. He has suggested *Chāṭigrāma* (Chittagong) which is equally impossible. The reading of this mint-name must remain a problem for the Numismatist until other better preserved specimens are brought to light.

R. D. BANERJI.

SOME SCULPTURES FROM KOSAM.

KOSĀM or the ancient city of Kauśāmbī is situated thirty-one miles South-West of Allahabad,[1] in the Allahabad District of the United Provinces. It is a famous holy place of the Jains, who visit it in very large numbers.[2] Kosām is also well-known as an ancient site and large numbers of ancient coins and terra-cottas are found every year at the close of the rainy season. In December 1908, Surgeon-Major B. D. Basu, M.D., I.M.S., (Retd.), visited Kosām, and collected a number of antiquities, which he had kindly allowed me to examine and which I describe in the following pages with his permission. Major Basu's small collection contains the oldest inscription from Kosām and a fine specimen of a "Tablet of homage" (*āyapaṭa*) a type of antiquity rarely found outside the limits of the Muttra (Mathura) District.

The Indian Museum contains an inscribed image of Śiva and Pārvatī dedicated in the year 139 of the Gupta era (458-9 A. D.) during the reign of Mahārāja Bhīmavarman,[3] and a number of ancient terra-cotta figures[4]. Recently Mr. F. E. Pargiter has edited two inscriptions on a pillar inside the fort at Kosām. Considered from the historical standpoint their importance is very slight.[5] The only other known inscriptions from Kosām are the Pabhosā Cave inscriptions of Āshāḍhasena and Bahasatimitra, edited by Dr. A. Führer.[6] The site has never been properly explored, and may yield very good results if excavated.

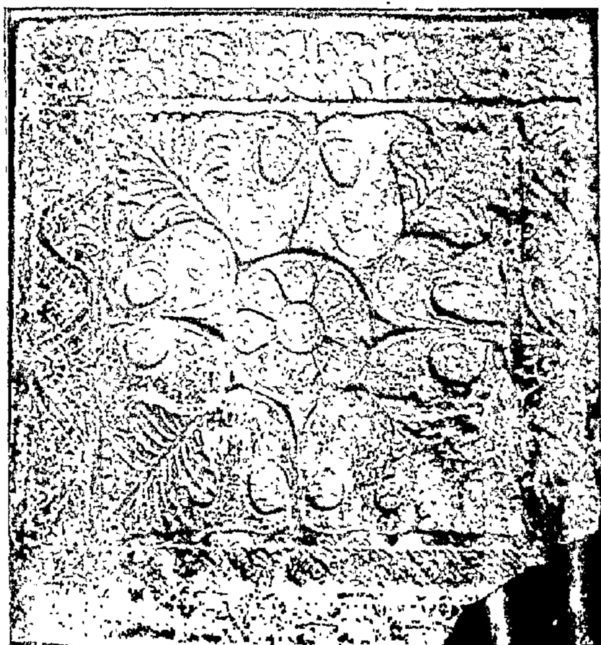
The antiquities collected by Major Basu from Kosām comprise :—

1. A carved stone slab with an ancient inscription, which is a tablet of homage (*āyapaṭa*) according to the inscription.
2. A head of Mathura red-sandstone.
3. A number of terra-cotta figures.

The stone slab (Pl. LXX, *a*) was discovered by Major Basu, on the door-step of a mud hut in Kosām. It is rectangular in shape and measures 2′ 1″×2′ 1″×3½″. With the exception of one corner, which is broken, it is in a good state of preservation.

[1] Cunningham, *A. S. R. Vol. I, p. 301, Vol. X, p. 1.*
[2] *Ibid, Vol. X, p. 1.*
[3] Fleet's *Gupta Inscriptions, p. 266.*
[4] Anderson. *Cat. and Handbook of the Arch. Coll. in the Indian Museum pp. 111-113, 283-287.*
[5] *A. S. R., Vol. I., p. 306 Ep., Ind., Vol. XI, p. 89.*
[6] *Ep. Ind., Vol. II, pp. 240-243.*

SCULPTURES FROM KOSAM.



a. INSCRIBED TABLET OF HOMAGE.



b. IMAGE OF SIVA-PARVATI.



c. TERRACOTTA RELIEF OF SIVA-PARVATI.



d. INSCRIPTION ON THE TABLET OF HOMAGE.



e. HEAD OF JAINA IMAGE.



f. TERRACOTTA HEAD OF FEMALE.



g. TERRACOTTA HEAD OF FEMALE.

It is carved on one face only, but the inscription, contrary to the usual practice observed in tablets of homage, has been incised on one edge of the slab. In the centre of the slab is a full-blown lotus flower, with eight petals, surrounded by four triratna symbols, of a design familiar in Mathura sculptures of the Kushān period, in which the projections on the sides are shaped as fish-tails. A good example is illustrated in V. A. Smith's *Jain Stupa and other antiquities*.[1] The corners of the square in which these symbols are disposed are occupied by four branches of the date-palm; and around the outside of the square runs a border adorned with a cable design or lotus-rosettes of various shapes, or undulating creepers mingled with blossoming lotus-flowers and the like.

One of the edges of the slab bears a mutilated inscription consisting of three lines (Pl. LXX, *d*) :—

1. Si[d]dha[m] R[ā]jño Ś[i]vamitrasa Sa[ṁ]vachhare 10,2 .... Kha ma-ha [?] ki ya......

2. Thavirasa Baladāsasa n[i]va[r]tana Śa (?)....Ś[i]vanandisa aṁtevāsisa.....

3. [Śi]vap[ā]l[i]tana āyapaṭo tha[pa]yati [arahata pujā] ye.

"Success ! The year 12 of the king Śivamitra...... at the request of the elder (*Sthavira*) Baladāsa...... the female pupil of Śivanandi ...... Śivapālita...... is dedicating this Āyapaṭa (*āryapaṭṭa*) in honour of the arhats."

The inscription is in a very bad state of preservation as the face on which it was incised was full of *kankar* nodules imbedded in the sandstone. With the progress of time the pieces of kankar have become detached and entire words have thus become illegible. Besides this a large piece of sandstone has peeled off from the centre of the record. The characters of the inscription are of the early Kushān type and its language is a mixture of Sanskrit and Prakrit, so common in Kushān inscriptions. The sculptured slab is called *āyapaṭa* (Skt. *āryapaṭṭa*) in the inscription. But similar slabs found in Mathura were called *āyāgapaṭa* (perhaps *āryāgrapaṭṭa*) and this term was, by Bühler, translated "Tablet of Homage." "An āyāgapaṭa is an ornamental slab, bearing the representation of a Jina or some other object of worship, and the term may be appropriately rendered by tablet of homage or of worship, since such slabs were put up in temples."[2] The inscriptions on such tablets which have been discovered at Mathura are invariably incised in archaic characters, and none of them are dated. The king Śivamitra, in the twelfth year of whose reign the tablet was dedicated, is not known from coins or any other contemporary inscriptions. He may have belonged to the same dynasty to which Bahasatimitra (*Brihaspatimitra*) belonged, whom we know from the Pabhōsa inscription as well as from the coins.[3]

Major Basu's collection contains a fine head of red-sandstone, which evidently belonged to a Jina image (Pl. LXX, *e*,). Its nose, mouth and ears have been more or less damaged. The top of the head is confined by what appears to be a close fitting cap, of the kind seen in several Jina images from Mathurā in the Lucknow Provincial Museum. The ears are elongated and there is a small circular mark (*ṭīkā* ?) in the centre of the forehead. It is 7″ high.

[1] *Jaina stupa and other antiquities*, Pl. VII.
[2] *Ep. Ind., Vol. II, p. 311.*
[3] V. A. Smith, *Cat. of Coins in the Ind. Mus. Cal, Vol. I, pp. 146 and 155.*

I have selected three specimens for illustration from Major Basu's collection of terra-cottas from Kosām. The first of these is a plaque measuring 6″×4″ (Pl. LXX, *c*). Its resemblance to the stone image of Śiva and Pārvatī, from Kosām, which was dedicated in the 139th year of the Gupta era (Pl. LXX, *b*) is so striking that I have no hesitation in calling it an image of Śiva-Durgā. The other two specimens are heads of females both of which are distinguished by the characteristic style of their coiffeures. In one of these (Pl. LXX, *f*) the mode is similar to that in the female figure on a railing pillar from Mathura, now in the Indian Museum (M. 15).[1] The art is crude but the expression on the face is pleasing. On the other specimen (Pl. LXX, *g*) the hair is disposed in a number of ringlets and drawn up in a bag or with a ribbon. Both of these wear thick heavy earings which almost touch the shoulders. It is very difficult to assign correct dates for these terra-cotta figures. The heads belong to the Gupta period and are not later than the 6th century A. D.

R. D. BANERJI.

[1] Anderson *Cta. and handbook of the Archæological Collections in the Indian Museum, Pt. I, p. 186.*

NOTES ON OLD RAJAGRIHA.[1]

VERY little is known about Old Rājagṛiha, *i.e.*, the ancient city in the valley enclosed by the Five Hills. It seems to have been abandoned as a royal residence by the kings of Magadha about 500 B.C. When Fa Hien visited it about 400 A.D., he noted that it was entirely deserted.[2] Both Fa Hien and Hiuen Thsang, however, considered this area to be the old city of King Bimbisāra, and inside it, or at any rate very closely connected with it they saw four stūpas commemorating certain incidents in the life of Buddha. Briefly, these were as follows: (1) Outside the north gate of the Palace City (or "north face of the royal precinct") a stūpa where Ajātaśatru liberated the drunken elephant; (2) north-east of this a stūpa where Śāriputra heard Aśvajita declare the law; (3) north of this, "not far off," a stūpa by a very deep hollow or ditch, where Śrīgupta's fire-pit was; and (4) north-east of this, at a "bend of the mountain city wall," a stūpa marking the site of Jīvaka's preaching hall, with the foundations of the house of Jīvaka and "the hollow of an old well" still visible.

None of these sites have as yet been identified. The walls which surrounded the old city are still fairly complete, but the area inside these walls is now covered with jungle, in many parts exceedingly dense, and nothing stands out prominently, except the Maṇiyār Maṭh, in the centre of the enclosure.

With one remarkable exception, all modern travellers, including the Jain Pandit employed by Col. Colin Mackenzie in 1821,[3] have recognised that an ancient city actually existed on this site, but only in very vague terms. Dr. Buchanan visited Rājgīr from the 18th to the 20th January, 1812, in the course of his survey of Bengal and Bihar. It is a great pity that practically the whole of his account of this portion of the survey has been overlooked, owing to the fact that Montgomery Martin, who edited the Reports for publication in 1838, cut out no less than 22 pages of the MS. at this point, so that the fragments referring to Rājgīr, which appear in Vol. I of his Eastern India, are limited to a description of the hot springs and of New Rājagṛiha. The complete Report, which is still in the India Office Library, shows that in Buchanan's time the people of the neighbourhood called the portion of the valley enclosed

[1] For an account of "Rājagṛha and its remains," accompanied by plans of the site, photographs, bibliographical references, etc., see Sir John Marshall's article in A. S. R., 1905-06, pp. 86—106.

[2] Legge's translation, p. 82.

[3] *Indian Antiquary*, Vol. XXXI, 1902, pp. 68-70.

by the walls "Hangsapurnagar," and that they considered it to be the site of an ancient city. Nevertheless, after receiving the reports of the assistants whom he sent to examine the Maṇiyār Maṭh, Buchanan came to the conclusion that there was not "the smallest trace of anything resembling a city, nor indeed is the situation at all fitted for the purpose. It is surrounded on every side by arid rocks, which would render the heat intolerable, and it is well known that all such situations in India are to the last degree insalubrious."[1]

If Buchanan had investigated the matter personally, he would undoubtedly have changed his mind; for the stone foundations of ancient buildings can still be traced in many places, and are particularly numerous in the neighbourhood of the northern entrance close to the road leading from the modern village of Rājgīr. Buchanan's own Journal, however, which has never been published and still remains in the India Office Library, makes it quite clear that he did not enter the enclosure, but with the exception of a visit to the Sonbhandar Cave confined his own observations to the portion of the Vipula and Vaibhār Hills in the immediate neighbourhood of the hot springs.[2]

In the year 1847 Capt. Kittoe mentioned that the name given to the locality was Hansu Taur (Tanr ?),[3] but at the present day this name as well as Buchanan's "Hangsapurnagar," both of which are interesting in connection with General Cunningham's identification of the stūpa on the hill at Giriak with the Goose Monastery of Hiuen Thsang,[4] seem to have been forgotten. The late Dr. T. Bloch was of opinion that this city in the valley was not used for permanent habitation, but only as a last resort for purposes of defence.

Though the map published by Sir John Marshall in 1905-06 gives a very accurate representation of the hills, etc., surrounding Old Rājagṛiha, the difficulty of surveying an area covered with dense jungle has stood in the way of any attempt to show the interior of the ancient city in any detail. For several years I have endeavoured to make myself as familiar with this area as the jungle permitted, and during the Christmas holidays of 1912-13 and 1913-14 I was enabled, by the kind assistance of Sir John Marshall, to complete a survey of it. The plan now shown represents with very considerable accuracy practically all the important features of the old city which are visible without excavation. Whether any of the foundations of walls, etc., which can be traced on the surface, belong to the ancient city or are comparatively modern is of course uncertain. On the other hand, it is evident that on the higher levels, especially those in the south of the area surveyed, the accumulation of soil in this valley has not proceeded with anything like the same rapidity as it has in the plains outside the hills, for the natural rock in many places is still close to the surface, and occasionally crops out over considerable areas.

For the loan of the necessary surveying apparatus I am indebted to Mr. F. Walford, Principal, Bihar School of Engineering. Most of the measurements were carried out by Babus Chandi Prasad Misra and Ram Lall, Student-Overseers of the

[1] MS. Report, pp. 363-364.
[2] MS Journal, pp. 167-186.
[3] J. A. S. B., Vol. XVI, Part II, p. 958.
[4] Rep. Archæological Survey, Vol. I, pp. 18-19.

School. I can confirm the accuracy of their work in many respects, but the portion of the work for which I am specially responsible is the preliminary survey of all the details shown in the plan, and the supervision of the men employed to clear the jungle along the lines of measurement, etc., during the survey.

The Reference Table on the plan will probably be sufficient to explain the results which have been obtained, but a few notes on some of the main features may be of interest.

(1) *External walls and gates.*—The north wall of the city has practically disappeared, having been carried away by the torrent which runs down from the ravine between Ratna-giri and Vipula-giri during the monsoon. A few fragments still remain, but these are rapidly vanishing. The unusually heavy rainfall of 1913 made considerable changes, especially in the longest portion of the wall which still exists. The eastern end of this, on which a survey mark was built in December 1912, was carried away, and at its western end enough subsided into the bed of the stream to conceal one of the two sāl posts which were visible during the cold weather of 1912-13. These posts are stumps embedded in a kind of white cement, and appear to be very old.

The original north gate was probably in the gap about 50 feet wide immediately east of the temple mound in the north-west corner of the city.

The west wall, as far as the Son Bhāṇḍar Cave, has also disappeared, owing to the branch of the Sarasvati stream which runs from the south. There is now no sign of a west gate. The remainder of this wall, as well as the whole of the south and east walls, are still practically complete.

The south wall is the highest, rising 30—40 feet above the level of the valley inside. In this there are three well-marked gaps, through which ancient roads can be traced. The pilgrims' road from Sona-giri to the Son Bhāṇḍār Cave now passes through one (No. 3 on plan) which probably represents a South-West gate leading towards Jethiān. Near the middle of this wall there is another gap which seems undoubtedly to have been the principal gate of the city on the south. From the Bangaṅgā opening in the hills a road can be distinctly traced, which turns to the west round a spur of Sona-giri, part of which has been cut away to make room for it, and then after some distance again turns sharply through this gap to enter the old city. This road can then be traced through the city as far as the north gate. It runs close to the eastern wall of the Maṇiyār Maṭh compound, as is shown by the dotted line in the plan, and was almost certainly the ancient main road.

Still further to the east is the gap (No 4 in plan) through which the modern road from Rājgīr now passes. Until recently, I was under the impression that this gap, like the road itself, was comparatively modern. A closer examination, however, leads to the conclusion that this gap represents an ancient gate, and that the original road through it corresponds very closely with the track still taken by the pilgrims who descend from Ratna-giri and cross the valley to Udaya-giri.

There is still another gap in this wall near the centre (No. 6 in plan) through which a torrent from Sona-giri now runs. Probably this was not a gate, but immediately to the south of it there is a " Bimbisāra road " leading some way up the hill, with artificial mounds or forts in the plain below.

The details connected with the section of the wall at the extreme east of the city are of much interest, and have been surveyed very carefully after much of the jungle was cut down. It is evident that the great embankment from Udaya-giri, called the Nākve Band, originally joined the city wall, and that the whole of the drainage from the Giriak valley on the western side of the watershed was diverted to the north through a moat on the outer side of the wall. For the first 300 yards or so of its length this moat has been cut out of solid rock, and is 15 to 20 feet deep. Floods have, however, broken through the Nākve Band in quite recent times, so that the main stream now runs to the south, and has commenced to cut away the city wall.

It is also clear that in ancient times the chief, if not the only communication, with the Giriak valley was maintained by a bridge which crossed the moat, in connection with the gap in the city wall marked (5) in the plan. The foundations for the columns which supported this bridge are still visible.

Another interesting feature in this neighbourhood is the embankment which runs to the east for more than a mile in a straight line as far as the Gṛidhrakūṭa Hill, where it joins a similar structure which leads across the valley up to the hill, and connects with the " Bimbisāra road " which can be clearly identified from Hiuen Thsang's account. This embankment seems to have been intended partly as a road and partly as a protection for the portion of the Giriak valley on its north. This area, though lying outside the city wall, appears to have been the site of a considerable settlement.

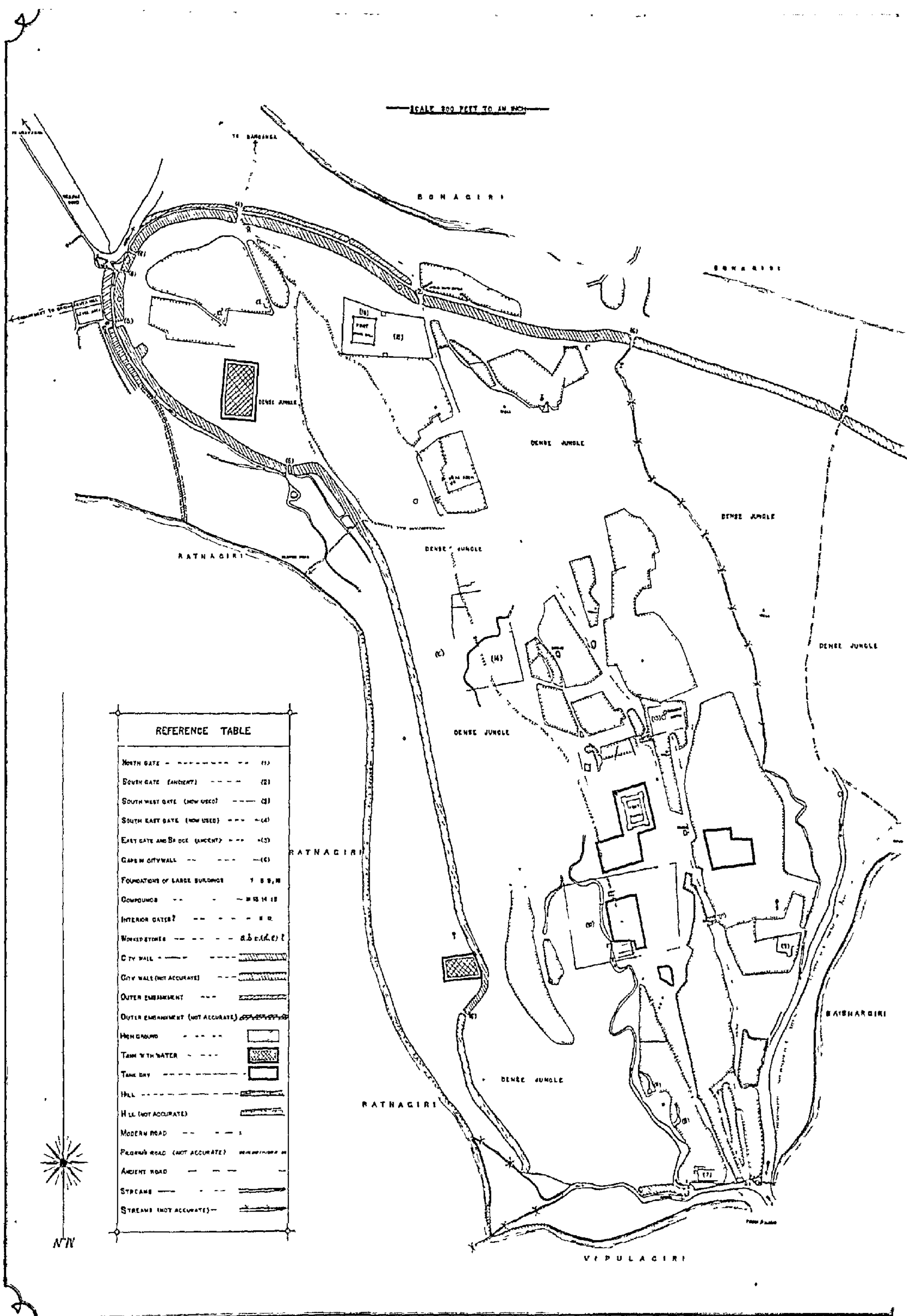
The remainder of the east wall has not been surveyed accurately, as time did not permit me to clear the dense jungle with which it is covered. There must have been a gate in this wall communicating with the remarkable zigzag road which runs up Ratna-giri and ends in a flat-topped structure close to the Jain temple on the top of the hill. It is possible that this gate is represented by the gap through which the pilgrims now pass, but close to this gap is another narrower one, the sides of which are faced with stone, sufficiently wide to allow a palanquin to pass. A similar gap can be seen in the south wall of New Rājagṛiha, close to the dâk bungalow, and immediately west of the large gap in this wall through which the modern road passes.

The only other feature of the eastern wall which may be mentioned is the curious bend near its north end, with a tank close to it outside the wall. This is possibly the site of the garden of Jīvaka mentioned by the Chinese pilgrims.

(2) *High areas inside the city.*—The plan shows that the interior of the city is by no means so uniform as a casual observer unfamiliar with the locality might suppose. On the contrary, a sharp distinction can be drawn between relatively high areas, on which, as a rule, stones and the foundations of buildings exist in abundance, and lower areas, in which few if any signs of previous inhabitation can be traced. Most of the portions of the city marked in the plan as covered with " dense jungle " are low-lying, and it is practically impossible to trace anything of interest in these, owing to the accumulations of soil and the changes caused by the sluggish streams which wind through them.

The irregularity of the boundaries of the higher areas shown in the plan is to some extent due to the fact that the survey lines have been taken along their bases, so that the appearance is complicated by débris fallen from above. In many cases the tops of these areas are defined by boundary walls. Some of them have obviously been built

PLAN OF OLD RAJAGRIHA.



up artificially with level tops, and thus resemble in all respects the numerous forts which can be seen on the hills which surround Old Rājagriha. Others, which are less definite have probably been built up in the usual manner from the débris of a succession of buildings on the site. Notable amongst the former are (*a*) the area on the north-west of the Maṇiyār Maṭh, which is about 1,500 feet long and 500 feet broad with a tank, now usually dry, in its centre ; (*b*) the approximately rectangular area lying about 800 yards south-east of the Maṇiyār Maṭh with the shrine of Patadevī on it, which is worshipped by Ahīrs as a protection against wild animals ; this stands quite 30 feet above the level of the old main road which runs past it on the west, and on the north and east is connected with similar, though lower, areas ; (*c*) the area to the south of this close to the south city wall (No. 15 in plan), on which stands a square fort with stone walls 8½ feet thick and circular bastions at the corners. This fort was altogether concealed by jungle, so thick that sixty woodcutters took more than four hours to clear the foundations of the walls sufficiently to allow measurements to be made. It appears to be of great antiquity, and as it lies in the very limited portion of Old Rājagriha from which the Gṛidhrakūta Hill is visible, it may be of interest in connection with the tradition that when King Bimbisāra was shut up in prison by his son Ajātaśatru, he was able to see Buddha on that hill.[1]

(3) *Roads.*—Two considerations are of assistance in tracing the ancient roads through the city. The first is that these roads do not cross old foundations, and are comparatively free from stones. The second is that they run along comparatively low levels, with higher areas on either side. The roads which traversed the level country outside the city itself seem to have been protected by walls on either side. In 1812 Buchanan was able to trace " the foundations of a double wall leading to the gap " all the way from the South Gate of New Rājagriha to the entrance to the valley. Though these traces are no longer obvious, a similar arrangement can be seen along portions of the road which leads from Old Rājagriha to the Bāngaṅgā gap.

The ancient main road through the city has already been described. At two places (Nos. 11 and 12 on plan) it passes through narrow gaps between embankments which project from the high areas on each side. These may possibly represent gates within the city itself, and one of them may be the " north gate of the palace city." It seems certain that the road on the east of this, which is now used, is comparatively modern, as throughout its length it crosses the foundations of walls and buildings, some of the more important of which are shown in the plan. Still further to the east there are signs of another main road, which probably ran from the north gate to the portions of the city on the east. Other roads seem to have run by the side of the city walls, usually on the inside, but there is a well-marked road on the outside, which extends from the centre of the south wall as far as the moat on the east. This road is protected externally with a similar though lower wall.

(4) *Wells.*—The Nirmāyal well close to the Maṇiyār Maṭh on its north is well known, and a tradition still exists that treasure was formerly concealed in it. This well is of the ordinary circular type, and has been excavated in a mass of brickwork. It is now dry, and about 25 feet deep. The similar well by the side of the old road

[1] *Life of Buddha.* Rockhill, p. 90.

near the Bangaṅgā gap from which Beglar obtained two inscriptions[1] still contains water.

There are several other wells which seem to have escaped the notice of previous observers, and indeed are known to very few of the villagers. These wells are all square, and have been cut out of solid rock. Just outside the old south gate there is one which still contains water, apparently stagnant. Its sides are about 10 feet square and 20 feet deep. The well north-west of this one and inside the city resembles it in all respects, except that it is choked with earth and is only about 12 feet deep. A third lies between this well and the Maṇiyār Maṭh, which is almost filled up. About 500 feet to the west of this is a fourth, about 30 feet deep. The lower part of this is square, but the upper third is built up in circular courses of stones. As it is surrounded by dense bamboo jungle which made observations impossible, its position shown in the plan is only approximate. A similar well is said to exist close to the south-west gate outside the walls, but I have not yet seen it.

(5) *Foundations of walls.*—All the walls which are shown in the plan were from 4′ to 4½′ thick. They are composed of large stones, and at present are in most cases practically flush with the ground. As already mentioned, walls of this type can frequently be traced along the edges of high areas. Others form the boundaries of rectangular compounds. The enclosure surrounding the Maṇiyār Maṭh is about 90 yards ong and 62 broad. The area of the compound north-east of this (No. 10) is about 10½ acres. The stream which runs through the similar compound further sou h (No. 14) has carried away large portions of the boundary walls, but enough remains to give an idea of its size. Though all these walls run approximately north and south, or east and west, the direction is not accurate, the error varying from 2 to 14 degrees.

(6) *Buildings.*—No attempt has been made to show the foundations of these in any detail. As a general rule, the houses must have been very small, not more than ten feet square. In a few places the foundations are circular.

In addition to the stone fort on the south which has already been mentioned, another strong building or fort (No. 9) stood close to the western wall, about half way between the Râjgīr entrance and the Son Bhāṇḍar Cave. The foundations are about five feet thick, and it seems to have been about 110 feet square. At its north-west corner was a semicircular tower about 36 feet in diameter.

Another large building (No. 7) ran parallel to the north wall of the city. Its breadth was about 72 feet, and its northern wall can be traced for 160 feet.

(7) *Dressed stones.*—Though a careful watch was kept, very few dressed stones were found. It seems certain that the original inhabitants of the valley were not acquainted with the use of dressed stone for buildings. At several places in the valley to the south of the Maṇiyār Maṭh, fragments of the curious low grind stools which are worshipped in Patna under the name of *gorayā* were found. The flat tops of these are smooth.

(8) *Identification of sites.*—Before sites can be assigned to the four stūpas which both Fa Hien and Hiuen Thsang associated with the north gate of the Palace City, the position of either this city itself or of the Garden of Jīvaka must be definitely

[1] Rep. Archæological Survey, Vol. VIII, pp. 85-86.

ascertained. In Plate XLI of Vol. III of the Archæological Survey Reports, General Cunningham marked on the map of Rājgīr what he called, the "probable positions" of these two sites. He placed the north gate of the Palace City (calling it Hastināpur Gate for some reason not mentioned) at a point on the modern road through the old city about 300 yards S.-S.-E. of the small temple which stands on the mound in the north-west corner of the city wall; and he marked the Garden of Ambapālī or Jīvaka outside the north wall and at the foot of Vipula-giri, with its centre about 400 yards east of this temple.

Although the present survey has shown that there is no evidence of the existence of either the gate or the garden in or very near the positions assigned to them by Cunningham, there are distinct signs of a gate on the ancient main road about 600 yards south of the temple, with brick remains close to it. This gap or gate stands at the north-east corner of the largest of the artificially raised areas found inside Old Rājagṛiha.

It seems quite possible that this area represents the site of the Palace City. Apart from the probability that the royal residence was a well-protected area inside the city and at a considerable distance from any of the gates in the outer wall, the Chinese pilgrims' account shows that its north gate was so far from the north gate of the mountain city that they found it convenient to describe the Gṛidhrakūta Hill after mentioning the four stūpas, and before describing the remainder of the notable places, such as the Karaṇda venuvana, associated with the north gate of the mountain city.

Still farther to the south, however, there is a similar though less distinct gap or gate across the main road close to the north-east corner of the small walled compound which surrounded the Maṇiyār Maṭh, so that the identification cannot be regarded as certain.

Similarly, there seem to be two possible sites for the Garden of Jīvaka. Hiuen Thsang stated that this was north-east of the north gate of the palace city, and close to a bend in the mountain city wall. According to another Chinese account cited by Watters,[1] it was apparently "in the enclosure between the city proper and the hills which form its outer defence on the east side." Both accounts would be correct if the garden were either near the north-east corner of the city wall, which has been partially washed away by the torrents from Ratna-giri, or near the small tank just outside the wall at the place where this makes a very distinct bend.

It is impossible to decide between these sites, which are both concealed by dense jungle. The probabilities seem to be in favour of the neighbourhood of the tank, but this, while north-east of the Maṇiyār Maṭh, is only slightly to the north of due east from the northern gap or gate on the old main road.

Between the sites suggested for the gate and the garden it is necessary to cross a stream shown in the plan. The bed of this lies low, and the stūpa by the very deep hollow or ditch marking the site of Śrīgupta's firepit was probably at some point along its ancient course, in or close to the large compound (No. 10).

V. H. JACKSON.

[1] *Yuan Chwang*, Vol. II, p. 151.

THE EARLY CHOLAS.

ANY attempt at writing a complete account of the Chōḷas from the very commencement of their career is but futile. The origin of the word Chōḷa, Chōḍa, Chōḷa, Śōḷa or Śōṟa is itself obscure. The earliest genuine records, namely, the contemporaneous stone and copper-plate inscriptions, which refer to their rule in Southern India, do not take us further back than the 9th Century A. D. Nor is it correct, therefore, to suppose that the Chōḷas prior to that period did not exist either as a race or as a sovereign power. There are authentic statements scattered here and there in literature and in inscriptions that strongly support the contrary view, *viz.*, that the fertile country watered by the Kāvērī river was from the earliest times known as 'the Chōḷas' and its king, 'the Chōḷa.' We find the earliest mention of these, made in the *Sabhāparvan* and the *Bhīshmaparvan* of the Mahābhārata. In the Aśōkan rock edicts (Nos. II and XIII) the form Chōḍa occurs as the name of a country bordering on the dominions of Aśōka in which "the faithful (*i.e.*, the Buddhists)" were living. Hiuen Tsiang whose visit to Southern India must, if at all, have happened during the supremacy of the Pallava kings, refers to a small tract of country somewhere in the Cuddapah district which bore the name Chuliye (Chulya). The country further south, that lay between this and the Pāṇḍya proper, Hiuen Tsiang recognised only as Dramiḍa or Dramiḷa which perhaps is a Sanskritised form of the word Tamil (Tamilakam). It may be that the Chōḷa country which was identical with or formed the major portion of Dramiḷa was at the time when Hiuen Tsiang visited Southern India quite thrown into the shade, if not actually absorbed into their dominions, by the powerful Pallavas, so much so that even the native name of it had fallen into disuse. The astronomer Varāhamihira, however, whose date is not far removed from that of Hiuen Tsiang, mentions by name the Chōḷa country as situated in the southern division of the Indian peninsula. The omission, therefore, by Hiuen Tsiang of the Chōḷas must evidently have been due to a mistake or to want of enquiry. According to the Rev. T. Foulkes the Buddhist works of Ceylon altogether omit the mention of the Chōḷa country which was intervening between Draviḍa and Pāṇḍya : and in the work called *Rājāvalī*, Chōḷa is included among the non-Buddhist kingdoms of Jambūdvīpa.[1] Two Pallava records of about the 7th Century A. D. from the upper rock-cut cave at Trichinopoly refer in unequivocal terms to the river Kāvērī and the grandeur of the Chōḷa country which was then in the hands

[1] *Ind. Ant.*, Vol. XVI. p. 4.

of the Pallavas. The Aihoḷe inscription of Pulakēśin II. of about this same period. mentions his conquest of the Chōḷa country and of the river Kāvērī "who has darting carps for her tremulous eyes." Kālidāsa, the greatest poet of India, whose date has been but roughly fixed to be before the 6th Century A. D. does not mention it by name but, all the same, seems to describe it where he speaks of the country through which Agastya walked and in which the river Kāvērī flows.

There is thus ample evidence to prove that the Chōḷas did exist as a race long before the 9th century A. D. and that their native country was undoubtedly identical with the fertile valley watered by the river Kāvērī. The continuity of their rule, however, was interrupted as in the case of so many other dynasties, either by the inroads of the Pāṇḍyas or the conquests of the powerful Pallavas. Tamil literature has much to say about the history of the early Chōḷas ; but the major portion of its account has to be accepted with caution. Some of these Tamil works are supposed even to be contemporaneous with the kings whom they describe. The historical facts imbedded in them are in their usual fashion mixed up freely with the rich imagery of oriental poetry. But the description of the life of the people, their simple habits and their love for manly sports and avocations, as pictured in them certainly gives an insight into the true ideal of Dravidian civilisation. Mr. Kanakasabhai Pillai has given translations of some of the historical Tamil texts in the pages of the *Indian Antiquary* [1] and in his invaluable book "The Tamils 1800 years ago." The *Kaḷavaḷi* [2] or 'the Battle-field' for instance, written by the poet Poygaiyār describes the fight at Kaḷumalam between the Chōḷa king Cheṅgaṇṇaṉ and the Chēra king Kaṇaikkāl-Iṟumporai wherein the latter is stated to have been defeated and imprisoned by the Chōḷa king but released through the intervention of the poet Poygaiyār whose poem had such good effect on the victorious Chōḷa that he granted the request of the poet, *viz.*, the release of the Chēra king. Cheṅgaṇṇaṉ is called the king of the country watered by the river Kāvērī. The same event is again referred to in the later poem *Kaliṅgattuparaṇi*. *Paṭṭinappālai* is exclusively devoted to the life of the reputed king Karikāla who had the banks of the Kāvērī constructed by his vassal kings and set his foot over the crowns of the Pāṇḍya and the Chēra. In chapter V of his *Tamils*, Mr. Pillai has collated all that is available from literature regarding the early Chōḷa kings of whom he mentions about eight. Karikāla was the most famous of them. It was he that changed his capital from Uṟaiyūr to Kāvirippūm-paṭṭinam, erected banks on either side of the Kāvērī, dug irrigation canals and patronised poets. After defeating the Pāṇḍyas and the Chēras he contracted diplomatic marriage relations with the latter and alliance with the former. The Leyden and the Tiruvālaṅgāḍu grants which are the only copper-plate inscriptions hitherto obtained that give a successive genealogical list [3] of the Chōḷa kings, do not supply us with any more new facts about the earlier members of the dynasty than what have been already available from litera-

[1] Vols. XVII pp. An extract from *Paṭṭinappālai* has also been given by Mr. K. V. Subrahmanya Aiyar in his dissertation on Karikāla and his times (*Ind. Ant.*, Vol. XLI, pp. 144ff.). Messrs. T. A. Gopinath Rao and Narayanasvami Aiyar have published translations of some more poems in the same journal.

[2] This has been ascribed to the 6th or the 7th Century A. D. by K. Pillai.

[3] The Udayēndiram plates of Pṛithivīpati II (*South-Ind. Inscrs.*, Vol. II, pp. 382 ff.) also supply a genealogical account of the Chōḷa kings. But here the information given is not so full as in the plates just mentioned, the apparent reason being that the Chōḷa genealogy is introduced only incidentally.

ture. The mythical pedigree in these records which traces the Chōḷas to the Sun includes such Puranic and legendary names as those of Manu, Ikshvāku, Pṛithu, Māndhātṛi, Muchukunda, Śibi, etc., and the eponymous Chōḷa (son of Bharata) after whom the race received the name Chōḷa.[1] Pañchapa, one of the legendary kings mentioned, perhaps acquired that name by his affording protection to 'the five (*pañchan*), *i.e.*, the Pāṇḍyas.' Suraguru was another who earned the title Mṛityujit by conquering even the god of death. Vyāghrakētu was still another from whom the Chōḷas evidently borrowed the banner of the tiger. All the kings so far enumerated, lived in ages previous to the Kali-yuga. To the Kali-yuga itself belonged Karikāla, the builder of the banks of the Kāvērī and the renewer of the town of Kāñchī; Kō-Chcheṅgaṇṇaṉ, the fervent devotee of Śiva, who was freed by the god from the bondage of a spider's body and Perunaṟ-Kiḷḷi who was the master of many sciences. Other famous kings are also stated to have preceded Vijayālaya from whose time the regular historical pedigree of the Chōḷas commences.

The vague memory with which the authors of the Leyden and the Tiruvālaṅgāḍu plates refer to these early Chōḷa kings is sufficient evidence to show that at the commencement of the 11th Century A.D. the date of the Leyden and the Tiruvālaṅgāḍu plates, their names carried with them no more significance than the other legendary names in the earlier portion of the genealogical list. It is surprising also that references to their rule and to their battles are rarely, if at all, found in the thousands of Chōḷa inscriptions distributed over almost every important village of the Chōḷa country. While thus the political status of these early Chōḷa kings was altogether forgotten at the commencement of the Chōḷa revival in the 9th Century A. D., their devotion to Śaivism which preceded this revival and their actual participation in its propaganda are established by the stories about them related in the *Periyapurāṇam*. Ko-Chcheṅgaṇṇaṉ was a staunch Śaiva who according to that story-book, built the temple at Jambukēśvaram and restored many a Śiva temple in the Chōḷa country from ruin. Prior to his birth as a king he was a spider, who long served Śiva by weaving his web over the *liṅga* stopping thereby the dry leaves from falling on it. The pious spider one day died in an encounter with a white elephant who had regularly been pulling out his web over Śiva. The spider, it is stated killed the elephant first by biting it in its proboscis and himself also died next on being dashed to the ground by the dying elephant. God Śiva liberated at once the spider from its animal body and blessed it to be born as the Chōḷa king Kō-Chcheṅgaṇṇaṉ. Although a staunch Śaiva himself Kō-Chcheṅgaṇṇaṉ is stated to have built a Vaishṇava temple as well. The *Periyapurāṇam* mentions other Chōḷa kings and chiefs such as Pugaḷśōḷa-Nāyaṉār, Iḍaṅgaḷi-Nāyaṉār and Kūṟṟuva-Nāyaṉār, not referred to, of course, in the Tiruvālaṅgāḍu and the Leyden plates, who much influenced by their actions the revival of Śaivism in Southern India. What then could have been the

[1] Strangely enough in early Tamil literature, we find no mention of the dynastic name Chōla or its variants. How and when it came into use has yet to be enquired into. Its mention in the form Chōḍa as applied to a kingdom bordering on the dominions of Aśōka, the name Chuliye given by Hiuen Tsiang to a district of the Telugu country, the title Chōḷa-Mahārāja found in some Telugu records of the 9th Century A. D., the name Śāṛa occurring in the Singhalese Chronicle *Mahāvaṁsa* and in some early Kanarese inscriptions of the Noḷambas, and Śoṇāḍu, a contraction of Śoḷa-nāḍu found in *Paṭṭinappālai* are the only references so far available with which we may connect the modern name Chōla.

reason that the famous Chōḷa kings Karikāla, Kō-Chcheṅgaṇṇaṉ and Perunar-Kiḷḷi, whose constant feuds with the Pāṇḍyas and the Chēras or their diplomatic alliances with either of them are so elaborately described by contemporaneous Tamil poets, should have faded away from the memory of the panegyrists of Rājarāja I and Rājēndra-Chōḷa I?[1] We have perhaps to suppose that between Karikāla, whose time has been calculated to be about the 6th Century A. D., and Vijayālaya of the 9th Century the Chōḷas must have become so entirely degenerate[2] as even to lose their identity owing to the rise of the Pallavas of Conjeeveram on one side and to the pushing conquests of the Pāṇḍyas on the other.

Of Ko-Chcheṅgaṇṇaṉ and Perunar-Kiḷḷi, who according to Mr. Kanakasabhai Pillai came to the throne after Karikāla, nothing was remembered except that the former was a devotee of Śiva and the latter was learned in sciences. Literature states that Kiḷḷivaḷavaṉ, the elder brother of Perunar-Kiḷḷi, married a Nāga princess named Pīlivaḷai during a romantic excursion and obtained by her a son called Toṇḍai. The king made this prince the ruler of the Toṇḍaimaṇḍalam and thus even the little power that might have been wielded by the Chōḷas went entirely out of their hands. Toṇḍai and his descendants are known in later history as Pallavas (Toṇḍaiyarkōn). It is significant also to note that the destruction of the capital town of Kāvērippúm-paṭṭinam happened during the reign of Kiḷḷivaḷavaṉ.

H. KRISHNA SASTRI.

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[1] It is inferred from statements made in literature that Karikāla must have been, at the best, only a usurper and that among the kings who may have succeeded him, there was much of disunion and discontent. This was apparently the reason why they soon disappeared before the advancing Pallavas and the Pāṇḍyas.

[2] Internal disputes and revolts during the time of Kiḷḷivalavan are referred to in the *Śilappadigāram*. He is also stated in the *Aganānūru* to have advanced against Madura and to have been defeated there.

TRIMŪRTI IMAGE IN THE PESHAWAR MUSEUM.

THIS image comes from a small village mound called Akhun Ḍhērī, situated about 12 miles to the north of Chārsadda, the ancient Peukelaotis or Pushkalavatī, and in the neighbourhood of the right bank of No. 4 branch canal. The mound was visited by my assistant Khan Sahib Mian Wasi-ud-Din, who has furnished the following note on the same :—

" The mound itself, which is not very extensive, being less than a hundred yards across, is entirely occupied with the houses of local cultivators. These cultivators have been in the habit of digging the outskirts of the mound for building purposes and more often for earth to fertilise their lands, and have occasionally made discoveries of copper coins. A rather large find of such coins, consisting of more than 600 specimens, was put up for sale and acquired for the Peshawar Museum. In the broken edges of the mound, which, in places, are as much as 20 feet in height, one can discern pieces of bones and pottery appearing at various depths and distances. There is no evidence of masonry or brick walling anywhere, and such as might have existed have been removed by the villagers for building their houses."

The image in question (Pl. LXXII, *a*) is made of the well-known travertine which is invariably the material of the Græco-Buddhist sculptures of Gandhārā. It is about 6¾ inches in height and 6¼ inches in width, and represents a six-armed Trimūrti, as is evidenced by the three heads and its attributes. The head to the proper right is that of Vishṇu, while the corresponding one on the other side is of Brahmā with the grisly beard. There is no room for doubt as regards the identification of the central figure which represents Śiva leaning against his vehicle, the bull. Unfortunately, two of the arms of the image are damaged, and of the attributes in the remaining four only three are more or less distinct. The upper right arm holds what looks like a trident, while the upper and lower left arms carry a small drum (skt. *ḍamaru*) and a water vessel (skt. *kamaṇḍalu*) respectively. The God wears ear-rings, necklace, bracelets, sacred thread, *dhotī* and a scarf covering only the left shoulder. To the proper right of the main figure is a kneeling devotee of whom only a trace remains. Traces are also visible of the frontal eye of Śiva.

The sculpture is in the Gandhāra style, but not very distinctively so. It must be regarded as unique, being the only example of its kind yet discovered in this part of the country. The date of the image may be assigned to about the beginning of the third century A. D., in other words, to the reign of Vāsudeva Kushaṇa, who appears from his coins to have been a worshipper of Śiva.[1] It is probable that, as the central figure represents Śiva, the person by whom the sculpture was dedicated, was a devotee of that god.

Now the questions arise what is the origin of the idea of Trimūrti, how old is the conception, and was the worship of Trimūrti ever developed into a regular cult in this district? The idea of Trimūrti seems to be comprised in certain fundamental laws of the universe. According to Hindu philosophers these laws consist of creation, protection and annihilation, which repeat themselves in an unalterable cycle in the case of every being, animate and inanimate. The qualities which bring about these processes are respectively *rajas*, *sattva* and *tamas*, over which preside the gods Brahmā, Vishṇu and Śiva, who constitute the Hindu triad or trinity. Thus in the *Vāyu Purāṇa*[2] it is stated :—

परस्परेण वर्त्तन्ते धारयन्ति परस्परम् ।
अन्योन्यमिथुनाह्येते ह्यन्योन्यमुपजीविनः ॥
क्षणं वियोगो न ह्येषां न त्यजन्ति परस्परम् ।
ईश्वरो हि परो देवो विष्णुस्तु महतः परः ॥
ब्रह्मा तु रजसोद्रिक्तः सर्गायेह प्रवर्त्तते ।

"They exist through each other and uphold each other; they are twin parts of one another, they subsist through one another, they are not for a moment separated; they never abandon one another. Iśvara (Mahādeva) is the supreme god; and Vishṇu is superior to Mahat (the principle of intelligence); while Brahmā, filled with *rajas*, engages in creation."

The same idea is expressed in the following hymn to Trimūrti,[3] a manuscript copy of which is preserved in the Government Oriental Manuscripts library, Madras :—

नमस्त्रिमूर्त्तये तुभ्यं प्राक्सृष्टेः केवलात्मने ।
गुणत्रयविभागाय पश्चाद्भेदमुपेयुषे ॥
नमो विश्वसृजे पूर्वं विश्वं तदनु बिभ्रते ।
अथ विश्वस्य संहर्त्रे तुभ्यं त्रेधास्थितात्मने ॥
रजोजुषे जन्मनि सत्वहृत्तये स्थितो प्रजानां प्रलये तमः स्पृशे ।
अजाय सर्गस्थितिनाशहेतवे त्रयोमयाय त्रिगुणाय संनतिः ॥

It may be noted *en passant* that the first verse in this hymn has been taken from Kālidāsa's *Kumārasaṁbhava*, and is addressed to Brahmā regarded as the embodiment of the Trinity and that the last Śloka forms the first of the benedictory verses in Bāṇa's Kādambarī.

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[1] Cf. *B. M. Cat.*, pl. XXIX, 10.
[2] Ch. V, vv. 18-21.
[3] For this quotation I am indebted to Rai Bahadur Hiralal.

But this conception of the Hindu triad does not seem to have come into vogue until the advent of the Paurāṇic period ; for, in the time of Yāska, the deities who were generally grouped together as the triad are not Brahmā, Vishṇu and Śiva, but Agni, Vāyu or Indra and Sūrya. And we find that at a still later period the three gods above-named are incorporated into the mystic symbol *Ōm*.[1]

As to the question whether the worship of Tri-mūrti ever developed into a regular cult I can only offer a surmise. It does not seem as though the worship of this triple deity became popular to the same extent as the worship of the individual deities composing the trinity, particularly Vishṇu and Śiva. The reason for this supposition rests in the fact that, except the example under notice, there are only a few representations of this god in the whole of this country, including the one at Elephanta near Bombay (Pl. LXXII, *e*) the identification of which is somewhat uncertain inasmuch as many of the attributes are wanting.[2] All the other images of this deity so far known come from Southern India. Of these the chief examples are what are called Ekapāda Trimūrti or Ekapāda Śiva at Tiruvorriyūr (Pl. LXXII, *c*), Nāgaḷāpuram and Tiruvānaikkāval.[3] The first and the last have Śiva for their central and principal figure with Brahmā on the proper right and Vishṇu on the left, while the second has Vishṇu in the centre with Śiva on the proper right and Brahmā on the left. A remarkable feature about these South Indian images is that the three figures of the triad have only three legs between them. Moreover, in the Tiruvānaikkāval specimen we find below each of the gods composing the trinity, his distinctive vehicle — the *haṁsa* for Brahmā, the bull for Śiva and the *garuḍa* for Vishṇu. Had the worship of Trimūrti been at all popular, we should naturally have expected to find descrip-

[1] It is worthy of note that, like so many other gods of the Hindu Pantheon, this also was absorbed into the later Mahāyānist worship, although the deities who made up the Buddhist triad were called Manjuśrī, Avalokiteśvara and Vajrapāṇi. (See Havell, *Indian Sculpture and Painting*, p. 61 and pl. XIX and *J.R.A.S.*, 1915, p. 397 ff.) Attention may be drawn also to the triple-headed figures in circular medallions in the *śikharas* of some of the temples of Bajaura in the Kulu District, about which Dr. Vogel says that they are either representations of Trimūrti or the triple form of Śiva. (See *A. S. R.*, 1909-10, p. 21.)

[2] Compare with this the images from Anadra (Pl. LXXII, *b*), from Baro in Central India (Pl. LXXII, *d*), from Barolli in the Udaipur State and from the Adbhuta temple at Chitorgarh. The first and the last bear almost the same attribute and the central figures in both are very much alike, making due allowance for the difference in date. The Anadra representation in particular possesses also a striking resemblance to the Elephanta specimen in respect of the face to the proper left. From the almost feminine technique of this face Mr. Havell argues that it is meant to portray Pārvatī (*Indian Allegory, Art, and Architecture*, pp. 6-8). To my mind, however, it appears that what the sculptor has attempted to picture in these figures is simply the triple aspect of Śiva—namely as creator, preserver, and destroyer. In the quality of preserver it is but natural to expect that the artist would take Vishṇu as his type; and so he has done. At the same time, it must be borne in mind that Vishṇu, being regarded as the preserver, performs the role of the mother of creation. Hence we find that in certain Purāṇas Vishṇu is described as the Śakti or female counterpart of Śiva. It is no wonder, therefore, that in the figures under consideration the portion allotted for Vishṇu is carved with feminine grace. Thus, in the centre we have a face possessing the calm serenity of creative intellect, while on one side is the grim masque of destructive force and on the other the benevolent kindliness of preservative power. Neither the frontal eye of the central image nor the discrepancies in the attributes of the rest could militate against this view, when we remember that all the three faces represent but different aspects of one and the same deity, Śiva.

In answer to Mr. Havell's contention that "Vishṇu's recognised place in the Trimūrti is in the centre," I need only point to the images from Tiruvorriyūr (Pl. LXXIII, *c*) and Tiruvānaikkāval in Southern India.

There is also a triple-headed figure in Cave No. 17A at Ellora which holds in one of its hands a fruit, in another a gourd and in the remaining two a mirror and some article, perhaps of toilet. Similar figures are met with in several other caves at Ellora.

[3] *Cf.* Gopinath Rao, *Elements of Hindu Iconography*, General Introduction, pl. F. and *A. S. R.*, Southern Circle 1911-12, Pl. V, fig. 2.

-tions of the cult in the Āgamic and Tāntric works. But, so far as my knowledge goes, there are only a few such descriptions and they all refer to the one-legged form of the god. For instance, in the *Śaiva-kāraṇāgama* the god is described thus[1] :—

ध्यायेत्कोटिरविप्रभं त्रिनयनं शीतांशुगंगाधरं हस्ते टंकमृग वराभयकरं पादैकयुक्तं विभुम् ।
शंभोर्दक्षिणवामकक्षभुजयोर्ब्रह्माच्युताभ्यां स्थितं तत्तल्लक्षणमायुधैः परिवृतं हस्तद्वयाढ्याञ्जलिम् ॥
ब्रह्माण्डप्रलये सुसंस्थितपदं ब्रह्माण्डमध्यस्थितं ह्येवं लक्षणसंयुतं पुरहरं पादैकमूर्त्तीकृतम् ॥

"We must meditate on the Lord whose splendour equals that of a crore of suns, who possesses three eyes, who carries (on his head) the moon and the river Ganges, who holds a small chisel (*ṭaṅka*) and an antelope in two hands, the remaining two hands being posed in the boon-granting and protecting attitudes, and who possesses only a single leg. On the proper right and left sides of Śiva are Brahmā and Vishṇu respectively with attributes characteristic of them and hands clasped in adoration. The Ekapāda (one-legged) image of Śiva, the destroyer of the Tripuras, who is firm even during the great deluge and who stands as the centre of the Universe, must be made in the above manner."[2]

In this connection the following remarks of Mr. Krishna Sastri, Assistant Archæological Superintendent, Madras, are well worth consideration :—"The so-called Trimūrti images perhaps represent the sun as the one representative of the three gods. The *Prayogaratna* mentions Rudra as the presiding deity of the sun. One of the varieties of Brahmā is, according to the *Nṛisiṅhaprāsāda*,

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[1] We are not yet in a position to fix the dates of such manuscripts, but we can safely conclude that none of them are earlier than the 10th century A. D.

[2] Compare with this the following extract from a Manuscript called the *Uttara-kāmikāgama* kindly supplied to me by Mr. Gopinatha Rao of Trivendram.

रक्तवर्णस्त्रिणेत्रश्च वरदाभयहस्तकः ।
कृष्णापरशुसंयुक्तो जटामकुटमण्डितः ॥
ऋज्वायतस्त्वथैकेन पादेनापि समन्वितः ।
दक्षिणोत्तरयोश्चैव पार्श्वयोरुभयोरपि ॥
कटिप्रदेशादूर्ध्वे तु ब्रह्मविष्ण्वेकाययुक् ।
स्त्रीमानवत्तयोर्मानं ब्रह्मविष्णोस्तु कल्पयेत् ॥
कृताञ्जलिपुटावेकपादयुक्तौ च वामतो ।
अथवा शिवलिङ्गस्य पार्श्वयोरन्तर्गतौ कृतौ ॥
अथवा तौ पृथक्स्थाप्यावेकविष्टरमास्थितौ ।
अथवा मध्यमे लिङ्गं पृथगालयसंस्थितम् ।
तस्य सव्येऽपसव्ये च ब्रह्मविष्णू तथा मतौ ।
पृथग्धामस्थितावेकधामस्था वा त्रिमूर्त्तयः ॥

"Of red complexion, with three eyes, with the hands held in the boon-giving and protecting attitudes, wearing an antelope skin and holding a battle-axe, embellished with a crown of matted hair, straight and long of limbs, also possessing only one leg, on the right and left sides and above the waist with the upper parts of Brahmā and Vishṇu respectively. Brahmā and Vishṇu must be made according to the standard of measurement called the Strīmāna and each with hands folded in adoration and with only one leg. Or these may be represented on the sides of a phallic emblem of Śiva. Or they may be separated from one another but seated on a single pedestal. Or they may be placed in different shrines, the middle one being that of *liṅga*, the one to the proper right of it being dedicated to Brahmā and that to the proper left to Vishṇu (*cf.* the Trimūrti shrine at Māmallāpuram). Thus, whether they occupy different shrines or are placed together in one and the same shrine, they are called Trimūrti.

of the form of the Sun-god. Temples of Traipurusha often mentioned in inscriptions from the Kanarese country are supposed to be dedicated to Brahmā, Vishṇu and Śiva, but, curiously enough, Brahmā is sometimes replaced by the Sun. The Brahmā, Vishṇu (Sūrya-Nārāyaṇa) and Śiva (Rudra) being all directly or indirectly recognised to be identical with the Sun, there is every possibility of the Trimūrti figures representing the Sun-god. It is still doubtful why the Tiruvoṟṟiyūr and Tiruvānaikkavāl images cannot be taken to symbolise the expanded significance of the Śiva *liṅga*. For, according to the *Śivarahasya*, all gods at the end of the creation find their resting place in the liṅga, Brahmā, being absorbed into its right, Janārdana into its left and Gāyatrī into its heart. Here it is worthy of note that a goddess occupies the centre."

We are therefore forced to the conclusion that the idea of Trimūrti remained only as an abstraction in the popular mind and was but rarely reproduced in concrete shapes. And, as I have shown above, the example under notice which is akin neither to Ekapāda Śiva nor to the bust of the so-called triple form of Śiva stands unique in this country. Later transformations of Trimūrti can be seen in the images of Dattātreya. Of him the legend says that he was composed of the divine essence of Brahmā, Vishṇu and Śiva and was born of Atri and Anasūya. One of the hymns addressed to this god describes him thus :—

जटाधरं पाण्डुरङ्गं शूलहस्तं कृपानिधिम् ।
सर्वरोगहरं देवं दत्तात्रेयमहं भजे ॥
आदौ ब्रह्मा मध्ये विष्णुरन्ते देवः सदाशिवः ।
मूर्तित्रय स्वरूपाय दत्तात्रेय नमोस्तुते ॥
भिक्षाटनं गृहे ग्रामे पात्रं हेममयं करे।
नानास्वादमयी भिक्षा दत्तात्रेय नमोस्तुते ॥
शूलहस्त गदापाणे वनमालासुकंधर ।
यज्ञसूत्रधर ब्रह्मन्दत्तात्रेय नमोस्तुते ॥

The representation also seems to illustrate the Vedāntic doctrine of unity in diversity.

V. NATESA AIYAR.

TRIMURTI IMAGE IN THE PESHAWAR MUSEUM.



a. TRIMURTI IMAGE IN THE PESHAWAR MUSEUM.



b. TRIMURTI IMAGE FROM ANADRA.



c. EKAPADA TRIMURTI FROM TIRUVORRIYUR.



d. TRIMURTI IMAGE FROM BARO.



e. TRIMURTI IMAGE FROM ELEPHANTA.

Photo-Engraved & printed at the Offices of the Survey of India, Calcutta.

ARCHÆOLOGICAL REPORTS PUBLISHED UNDER OFFICIAL AUTHORITY.

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Four reports made during the years 1862-63-64-65, Volume I. (C. S.)	A. Cunningham, Director-General, Archæological Survey of India.	Government Central Branch Press, Simla, 1871.
Four reports made during the years 1862-63-64-65, Volume II. (C. S.)	Ditto . . .	Ditto.
Report for the year 1871-72, Volume III. (C. S.)	Ditto . . .	Superintendent, Government Printing, Calcutta, 1873.
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[1] The continued series of reports by A. Cunningham (Director-General of the Archæological Survey of India) which extend over the years 1862-1887 inclusive, are marked (C. S.) in this list.
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(*a*) Madras Presidency—		
The Seven Pagodas	Ditto . . .	Ditto.
Velur	Ditto . . .	Ditto.
Trichinopoly	Ditto . . .	Ditto.
Srirangam	Ditto . . .	Ditto.
Madura	Ditto . . .	Ditto.
Tanjore	Ditto . . .	Ditto.
Kombakonam	Ditto . . .	Ditto.
Chillambaram	Ditto . . .	Ditto.
Conjeveram	Ditto . . .	Ditto.
Bijanagar	Ditto . . .	Ditto.
(*b*) Bombay Presidency—		
Ahmedabad	Ditto . . .	Ditto.
Poona	Ditto . . .	Ditto.
Karli	Ditto . . .	Ditto.
Ambarnath	Ditto . . .	Ditto.
Elephanta	Ditto . . .	Ditto.
(*c*) Bijapur	Ditto . . .	Ditto.
(*d*) Rajputana—		
Mount Abu	Ditto . . .	Ditto.
Ajmir	Ditto . . .	Ditto.
Jaipur	Ditto . . .	Ditto.
Ulwar	Ditto . . .	Ditto.

Title of work.	Name and official designation of author.	Press, date of publication and issue price of each volume or of complete work.
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(*f*) Punjab—		
(Memorandum on Ancient Monuments in Eusafzai, with a description of the explorations undertaken from the 4th February to the 16th April 1883, and suggestions for the disposal of the sculptures.)	Ditto . . .	Ditto.
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(*b*) Golden temple at Amritsar, Punjab.	Ditto . . .	Ditto.
(*c*) Delhi	Ditto . . .	Ditto.
(*d*) Græco-Buddhist sculptures from Yusufzai.	Ditto . . .	Ditto.
(*e*) Great temple to Siva and his consort at Madura.	Ditto . . .	Ditto.
(*f*) Meywar	Ditto . . .	Ditto.
(*g*) Buildings of the Punjab . .	Ditto . . .	Ditto.
(*h*) Great Buddhist Tope at Sanchi.	Ditto . . .	Ditto.
(*i*) Tomb of Jahangir at Shahdara near Lahore.	Ditto . . .	Ditto.
(*j*) The temples at Trichinopoly	Ditto . . .	Ditto.
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Annual Report of the Director-General of Archæology in India for the year 1911-12, Part II.	J. H. Marshall, C.I.E., Litt.D., F.S.A., Director-General of Archæology in India.	Superintendent, Government Printing, Calcutta, 1915.
Ditto for the year 1912-13, Part I.	Ditto . . .	Ditto, 1915. Rs. 2. or 3*s.*
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Notes on the Amaravatī Stūpa .	J. Burgess, Government Archæological Surveyor for Western and Southern India.	Government Press, Madras, 1882. Rs. 7-8-0.
Notes and Inscriptions from Temples in the Madura District, Vol. IV.	Ditto . . .	Ditto, 1885-86.
Tamil and Sanskrit Inscriptions with some notes on village antiquities collected chiefly in the south of the Madras Presidency.	Ditto . . .	Ditto, 1886.
List of ancient monuments for conservation in the Madras Presidency in 1884.	Ditto . . .	Ditto, 1886-87.
Ditto in 1891.	A. Rea, Archæological Surveyor, Madras.	Ditto, 1891. Re. 0-6-0.
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Ditto Vol. IV, 1896-97	Ditto . . .	Ditto, 1897.
Ditto „ V, 1898-99	Ditto . . .	Ditto, 1899.
Ditto „ VI, 1900-01	Ditto . . .	Ditto, 1901.
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Ditto „ VIII, 1905-06	Ditto . . .	Ditto, 1907.
Ditto „ IX, 1907-08	Drs. E. Hultzsch, Professor in the University of Halle, and Sten Konow, Government Epigraphist for India.	Ditto.

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List of tombs and monuments of Europeans, etc., in the Madras District.	Government of Madras . .	Government Press, Madras, 1898. Re. 0-12-0.
List of tombs and monuments erected in Madras.	Ditto . . .	Ditto. Re. 0-6-0.
List of statues, monuments and busts erected in Madras in honour of distinguished servants of the State.	Ditto . . .	Ditto, Re. 0-1-6.
Annual Report of the Archæological Survey, Madras and Coorg, for the year 1899-1900.	A. Rea, Superintendent, Archæological Survey.	Ditto, 1900.
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The antiquities of Kolhapoor illustrated. (Ser. 350, Sel. Rec., Bombay, N. S. No. 8.)	......	1854.
Extracts in connection with Mahomedan Architecture at Beejapoor, in the Satara Districts, etc. (1854). (Ser. 350, Sel. Rec., Bombay, N. S. No. 40.)	.. ...	1857.
Observations on inscriptions on copper-plates dug up at Naroor, in the Koodal Division of the Sawunt Waree State, 1848; with translations and facsimiles, 1851. (Ser. 350, Sel. Rec., Bombay, N. S. No. 10.)	Major G. LeG. Jacob . .	1855.
Rock-cut Temples of Western India.	J. Fergusson, F.R.S., M.R.A.S.	Cundall & Downes, London, 1864.
Report on the illustration of the Archaic Architecture of India, etc.	Dr. Forbes Watson and Mr. Fergusson, General Cunningham, and Colonel Meadows Taylor.	1869.
Notes to accompany a series of photographs designed to illustrate the Ancient Architecture of Western India.	Captain Lyon, late of Her Majesty's 68th Regiment of Light Infantry.	Carey Brothers, Old College Street, 3, Geneva, 1871.

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Memorandum on the antiquities at Dabhoi, Ahmedabad, Than, Junagadh, Girnar, and Dhank.	James Burgess, Archæological Surveyor and Reporter to Government.	Ditto, 1875.
Memorandum on the remains at Gumli, Gop, and in Kachh, etc.	Ditto . . .	Ditto.
Provisional lists of Architectural and other Archæological remains in Western India, including the Bombay Presidency, Sindh, Berar, Central Provinces, and Hyderabad.	Ditto . . .	Ditto.
Translations of inscriptions from Belgaum and Kaládgi Districts in the Report of the first season's operations of the Archæological Survey of Western India and of inscriptions from Kathiawar and Kachh.	J. F. Fleet, Bo.C.S., and Hari Vaman Limaya, B.A.	Ditto, 1876.
Buddhist Caves of Ajanta. Second edition.	Prepared by Major R. Gill and revised by James Burgess, F.R.G.S., M.R.A.S.	Ditto, 1876.
Notes on the antiquities of the Talukas of Parner, Sangamner, Ankole, and Kopergaum forming the charge of the 2nd Assistant Collector, Ahmadnagar, with revised lists of remains in the Ahmadnagar, Nasik, Puna, Thana, and Kaldági Zillahs.	W. F. Sinclair, Bo.C.S., and J. Burgess, Archæological Surveyor and Reporter to Government.	Ditto, 1877.
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Lists of the antiquarian remains in the Bombay Presidency, Sindh and Berâr, with an Appendix of inscriptions from Gujrat.	J. Burgess, Archæological Surveyor and Reporter to Government.	Ditto, 1885.
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Account of a visit to Mount Parisnath (in Chutia Nagpoor) and the Jain Temples thereon in 1827. (Ser. 250, Sel. Rec., Bengal, No. 38.)	A. P.	1861.

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List of objects of antiquarian interest in Bengal.	......	Ditto, 1879.
A List of the objects of antiquarian interest in the Lower Provinces of Bengal (with historical descriptions).	......	Ditto, 1879. Not for sale.
Revised list of ancient monuments in Bengal, 1886.	Government of Bengal, P. W. Department, assisted by J. D. Beglar and W. B. B.	Ditto, 1887.
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Dacca Division . . .	......	Bengal Secretariat Press, Calcutta. Re. 1.
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Report with photographs of the repairs executed to some of the principal temples at Bhūbānēsvăr and caves in the Khăndăgirī and Udaigiri Hills, Orissa, between 1898 and 1903.	M. H. Arnott, M.Inst.C.E., Executive Engineer, Bengal Public Works.	Waterlow & Sons, Limited, London, W., 1903. Rs. 10-9-0.
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Ditto for the year ending June 1896.	Ditto . .	Ditto, 1896.

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Annual Progress Report of the Archæological Surveyor, Northern Circle, for the year ending 31st March 1906.	Ditto . . .	Ditto, 1906.
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Ditto for the year ending 31st March 1910.	......	Ditto, 1910.

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The remains near Kasia in the Gorakhpur District.	V. A. Smith, I.C.S. . .	Ditto, Re. 1.
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